CHRISTIE LH25

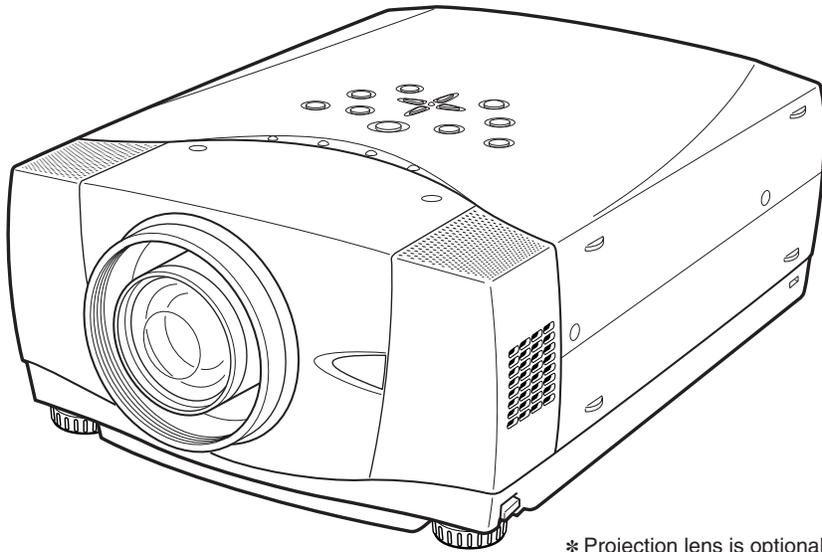## MODEL 38-VIV212-01
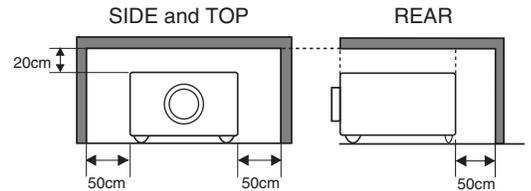
∗Projection lens is optional.

User's Manual

TO THE OWNER

Before operating this projector, read this manual thoroughly and operate the projector properly.

This projector provides many convenient features and functions. Operating the projector properly enables you to manage those features and maintains it in better condition for a considerable time.

Improper operation may result in not only shortening the product-life, but also prevents malfunctions, fire hazard, or other accidents.

If your projector seems to operate improperly, read this manual again, check operations and cable connections and try the solutions in the "Trouble-shooting" section at the end of this booklet. If the problem still persists, contact the sales dealer where you purchased the projector or the service center.

⚠ SAFETY PRECAUTIONS

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PROJECTOR TO RAIN OR MOISTURE.

● This projector produces intense light from the projection lens. Do not stare directly into the lens. Eye damage could result. Be especially careful that children do not stare directly into the beam.

● This projector should be set in the way indicated. If not, it may result in a fire hazard.

● Take appropriate space on the top, sides and rear of the projector cabinet for allowing air circulation and cooling the projector. Minimum distance should be taken. If the projector is to be built into a compartment or similarly enclosed, the minimum distances must be maintained. Do not cover the ventilation slot on the projector. Heat build-up can reduce the service life of your projector, and can also be dangerous.

SIDE and TOP   REAR

20cm

50cm   50cm   50cm

● Do not put any flammable object or spray can near the projector, hot air is exhausted from the ventilation holes.

● If the projector is not to be used for an extended time, unplug the projector from the power outlet.

READ AND KEEP THIS USER'S MANUAL FOR LATER USE.

⚠	**CAUTION**	⚠
	RISK OF ELECTRIC SHOCK **DO NOT OPEN**	

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE EXCEPT LAMP REPLACEMENT. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	
⚠ THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.	⚠ THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE USER'S MANUAL WITH THIS UNIT.

SAFETY INSTRUCTIONS

All the safety and operating instructions should be read before the product is operated.

Read all of the instructions given here and retain them for later use. Unplug this projector from AC power supply before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.

Follow all warnings and instructions marked on the projector.

For added protection to the projector during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power line surges.

Do not expose this unit to rain or use near water... for example, in a wet basement, near a swimming pool, etc...

Do not use attachments not recommended by the manufacturer as they may cause hazards.

Do not place this projector on an unstable cart, stand, or table. The projector may fall, causing serious injury to a child or adult, and serious damage to the projector. Use only with a cart or stand recommended by the manufacturer, or sold with the projector. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturers.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

Slots and openings in the back and bottom of the cabinet are provided for ventilation, to insure reliable operation of the equipment and to protect it from overheating.

The openings should never be covered with cloth or other materials, and the bottom opening should not be blocked by placing the projector on a bed, sofa, rug, or other similar surface. This projector should never be placed near or over a radiator or heat register.

This projector should not be placed in a built-in installation such as a book case unless proper ventilation is provided.

Never push objects of any kind into this projector through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the projector.

This projector should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized dealer or local power company.

Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this projector where the cord may be damaged by persons walking on it.

Do not attempt to service this projector yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Unplug this projector from wall outlet and refer servicing to qualified service personnel under the following conditions:
a. When the power cord or plug is damaged or frayed.
b. If liquid has been spilled into the projector.
c. If the projector has been exposed to rain or water.
d. If the projector does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projector to normal operation.
e. If the projector has been dropped or the cabinet has been damaged.
f. When the projector exhibits a distinct change in performance-this indicates a need for service.

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or injury to persons.

Upon completion of any service or repairs to this projector, ask the service technician to perform routine safety checks to determine that the projector is in safe operating condition.

COMPLIANCES

Federal Communication Commission Notice

Note : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

   – Reorient or relocate the receiving antenna.
   – Increase the separation between the equipment and receiver.
   – Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
   – Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Model Number   : 38-VIV212-01
Trade Name   : Christie
Responsible party   : CHRISTIE DIGITAL SYSTEMS, Inc.
Address   : 10550 Camden Drive Cypress, CA 90630 USA
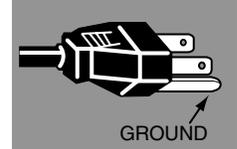Telephone No.   : (714) 236-8610

AC POWER CORD REQUIREMENT

The AC Power Cord supplied with this projector meets the requirement for use in the country you purchased it.

AC Power Cord for the United States and Canada :

AC Power Cord used in the United States and Canada is listed by the Underwriters Laboratories (UL) and certified by the Canadian Standard Association (CSA).
AC Power Cord has a grounding-type AC line plug. This is a safety feature to be sure that the plug will fit into the power outlet. Do not try to defeat this safety feature. Should you be unable to insert the plug into the outlet, contact your electrician.

GROUND

THE SOCKET-OUTLET SHOULD BE INSTALLED NEAR THE EQUIPMENT AND EASILY ACCESSIBLE.

TABLE OF CONTENTS

TRADEMARKS
- Apple, Macintosh, and PowerBook are trademarks or registered trademarks of Apple Computer,Inc.
- IBM and PS/2 are trademarks or registered trademarks of International Business Machines, Inc.
- Windows and PowerPoint are registered trademarks of Microsoft Corporation.
- Each name of corporations or products in the user's manual is a trademark or a registered trademark of its respective corporation.

FEATURES AND DESIGN

This Multimedia Projector is designed with most advanced technology for portability, durability, and ease of use. This projector utilizes built-in multimedia features, a palette of 16.77 million colors, and matrix liquid crystal display (LCD) technology.

◆ Compact Design

This projector is extremely compact in size and weight. It is designed to carry and work anywhere you wish to use.

◆ Compatibility

This projector widely accepts various video and computer input signals including;

● **Computers**
IBM-compatible or Macintosh computer up to 1280 x 1024 resolution.

● **6 Color Systems**
NTSC, PAL, SECAM, NTSC 4.43, PAL-M or PAL-N color system can be connected.

● **Component Video**
Component video signal, such as a DVD player output high definition TV signals including 480i, 480p, 575i, 575p, 720p, 1035i or 1080i, can be connected.

● **S-Video**
S-Video signal, such as a S-VHS VCR output signal, can be connected.

◆ High Resolution Image

This projector provides 1366 x 768 dots resolution for computer input and 800 horizontal TV lines. Resolution from a computer between XGA (1024 x 768) and SXGA (1280 x 1024) is compressed into 1024 x 768 dots. This projector cannot display image of over 1280 x 1024 dots. When resolution of your computer is over than 1280 x 1024, reset a computer output for lower resolution.

◆ Multi-Scan System

This projector has Multi-Scan System to conform to almost all computer output signals quickly. There is no need for troublesome manual adjustment of frequency and other settings.

◆ One-Touch Auto PC Adjustment

Incoming computer video signals are recognized and best adjustment is automatically set by Auto PC Adjustment. No complicated setup is necessary and projection is always precise.

◆ Motor-driven Lens Shift

Projection lens can be moved up and down with motor-driven lens shift function. This function makes it easy to provide projected image where you want.
Zoom and focus can be also adjusted with motor-driven operation.

◆ Digital Zoom (for Computer)

Digital Zoom function adjusts image size to approx. 1/4 ~ 49 times of original image size, allowing you to focus on crucial information at a presentation.

◆ Keystone Correction

Positioning of a projector may result in distorted image being displayed in a trapezoid shape. Keystone Correction solves this problem by digitally altering projection to produce undistorted images.

◆ Power Management

Power Management function is provided to reduce power consumption while a projector is not in use.
This Power Management function operates to turn Projection Lamp off when a projector detects signal interruption and any button is not pressed over 5 minutes. Projection Lamp is automatically turned on again when a projector detects signal or any operation button is pressed.
This projector is shipped with this function ON.

◆ Digital Visual Interface

This projector is equipped with DVI 24-pin terminal for connecting DVI output from a computer.

◆ Multilanguage Menu Display

Operation menu is displayed in; English, German, French, Italian, Spanish, Portuguese, Dutch, Swedish, Chinese, Korean or Japanese.

◆ Color management

You can make fine adjustments to the colors on the screen to change them to the desired colors.
At this time, the colors are changed within an extremely narrow hue range, so that other colors are not affected. The luminance and gamma values can also be changed in addition to the hue.
This allows colors to be reproduced with great accuracy. Faithful color reproduction and color correction which effectively matches colors to scenes or emphasizes colors can be achieved.
Adjustments can be made easily, because they are reflected in the on-screen images in real time. Up to eight colors can be adjusted at a single time. The adjustment data can be saved for images in both in video mode and PC mode (total 8 images). The adjusted data is displayed in a list for easy checking.

◆ Auto Picture Control

The gamma value can be adjusted automatically in accordance with the luminance of the screen. Images that are either too dark or too bright can be adjusted to the optimum level, so that these images can be reproduced without any distortion.
Equipped with an advanced Intelligent Digital Sharpness Control which controls the sharpness automatically in accordance with the images on the screen.

◆ ChristieNet (Optional)
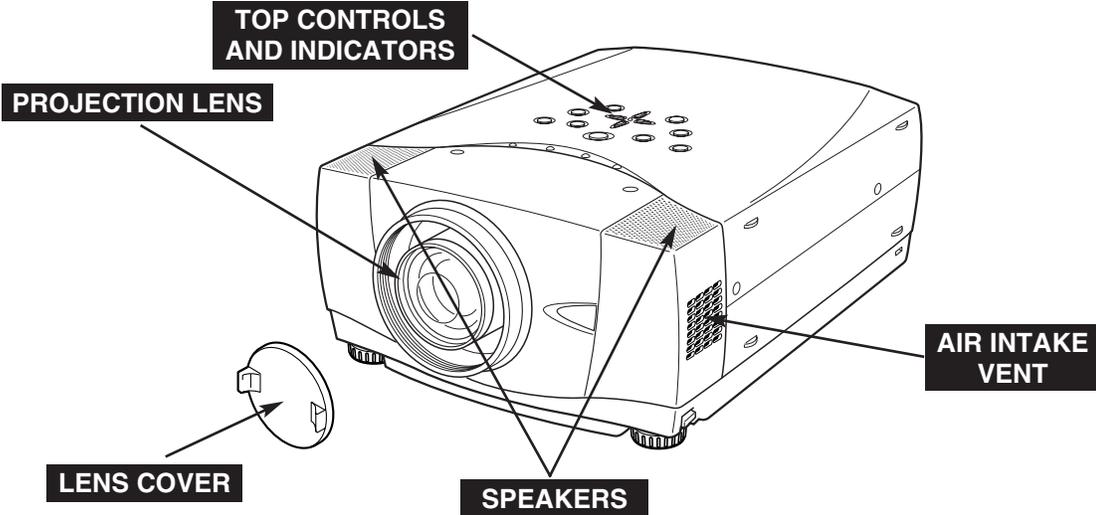
ChristieNet is an optional product to control and set up a projector via the network cable. By accessing to the connected projector using the web browser on your computer. It can be controlled and set up the projector remotely. Contact the sales dealer where you purchased this projector for optional parts.

PREPARATION

NAME OF EACH PART OF PROJECTOR

FRONT OF CABINET

TOP CONTROLS AND INDICATORS

PROJECTION LENS

AIR INTAKE VENT

LENS COVER

SPEAKERS

BACK OF CABINET

POWER CORD CONNECTOR

TERMINALS AND CONNECTORS

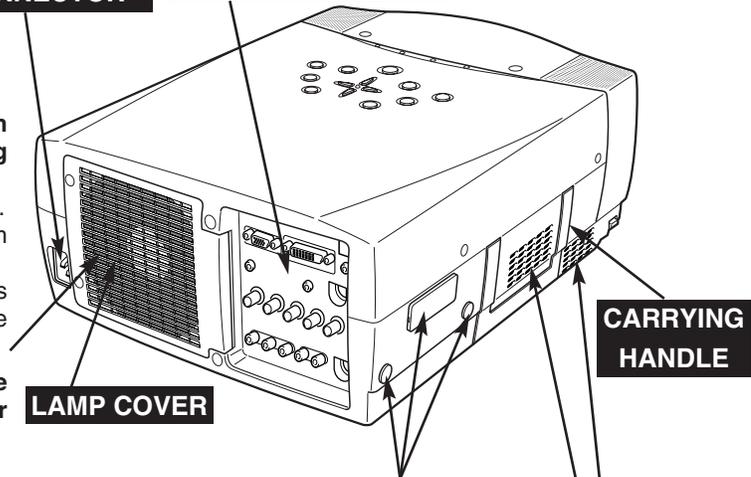**EXHAUST VENT**

⚠ **HOT AIR EXHAUSTED !**

Air blown from exhaust vent is hot. When using or installing a projector, following precautions should be taken.
● Do not put a flammable object near this vent.
● Keep rear grills at least 3'(1 m) away from any object, especially heat-sensitive object.
● Do not touch this area, especially screws and metallic parts. This area will become hot while a projector is used.

This projector detects internal temperature and automatically controls operating power of Cooling Fans.

LAMP COVER

CARRYING HANDLE

When attaching the ChristieNet (optional part) to the projector, remove the these parts.
Refer to the user's manual in the optional ChristieNet.

BOTTOM OF CABINET
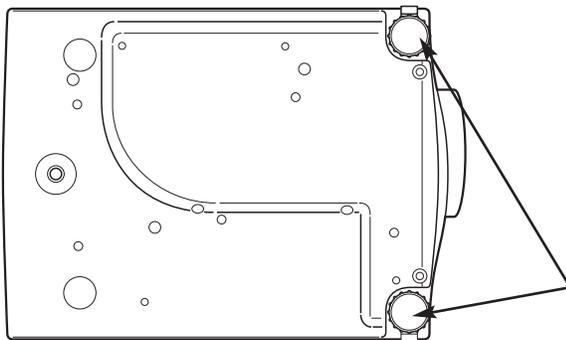
AIR INTAKE VENTS

This projector is equipped with cooling fans for protection from overheating. Pay attention to following to ensure proper ventilation and avoid a possible risk of fire and malfunction.
● Do not cover vent slots.
● Keep side clear of any objects. Obstructions may block cooling air.

ADJUSTABLE FEET AND FEET LOCK LATCHES

SETTING-UP PROJECTOR

CONNECTING AC POWER CORD

This projector uses nominal input voltages of 100-120 V or 200-240 V AC. This projector automatically selects the correct input voltage. It is designed to work with single-phase power systems having a grounded neutral conductor. To reduce risk of electrical shock, do not plug into any other type of power system.
Consult your authorized dealer or service station if you are not sure of the type of power supply used.
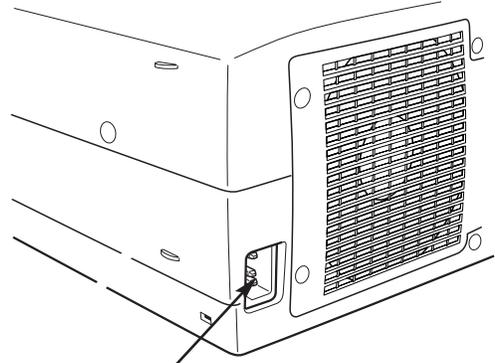Connect the projector with peripheral equipment before turning the projector on. (Refer to pages 11 ~ 13 for connection.)

⚠ **CAUTION**

For safety, unplug AC Power Cord when an appliance is not used.
When this projector is connected to the outlet with an AC Power Cord, the appliance is in Stand-by Mode and consumes a little electric power.

Connect the AC Power Cord (supplied) to the projector.
The AC outlet must be near this equipment and must be easily accessible.

CAUTION

The AC Power Cord must meet the requirement of the country where you use the projector.
Confirm the AC plug type with the chart below. The proper AC Power Cord must be used.
If the supplied AC Power Cord does not match the AC outlet, contact your sales dealer.

Projector side	AC Outlet side	
	For U.S.A. and Canada	**For Continental Europe**
	Ground	
To POWER CORD CONNECTOR on the projector.	To AC Outlet. **(120 V AC)**	To AC Outlet. **(200 - 240 V AC)**
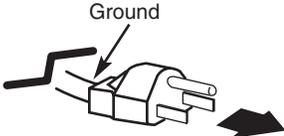
LENS INSTALLATION

Before setting up a projector, install Projection Lens on Projector.

1. Before installation, check where a projector is used and prepare a suitable lens. For specifications of a Projection Lens, contact sales dealer where you purchased a projector.

2. For installation, refer to installation manual in the optional lens.

NOTE;

When installing the lens, remove the cover cap in the projector.

COVER CAP
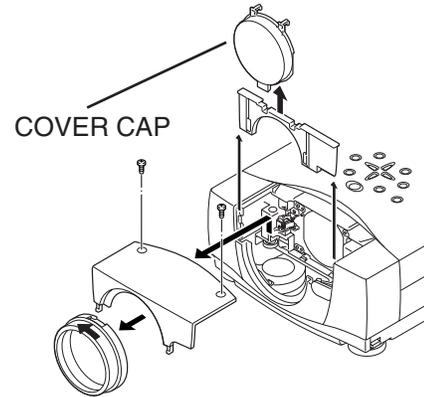
POSITIONING PROJECTOR

This projector is designed to project on a flat projection surface.

SCREEN

ROOM LIGHT
Brightness in a room has a great influence on picture quality. It is recommended to limit ambient lighting in order to provide best image.
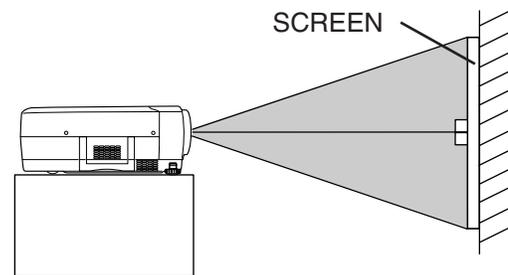
LENS SHIFT ADJUSTMENT

Projection lens can be moved up and down with motor-driven lens shift function. This function makes it easy to provide projected image where you want. Refer to P18 for operation.

Highest Lens Shift

H1

H2

H1 : H2 = 6 : 1

Lowest Lens Shift

H3

H3 : H4 = 1 : 1

H4
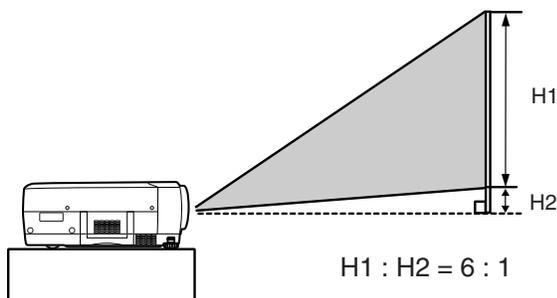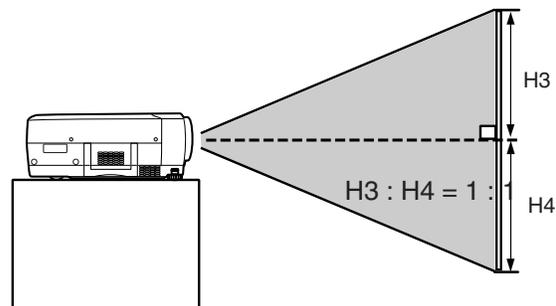
NOTE
Screen size and lens shift ratio on the above charts are standard values and they may change by positioning conditions.

ADJUSTABLE FEET

Picture tilt and projection angle can be adjusted by rotating ADJUSTABLE FEET. Projection angle can be adjusted to 10.5 degrees.

1 Lift front of a projector and pull FEET LOCK LATCHES on both sides of a projector.

2 Release FEET LOCK LATCHES to lock ADJUSTABLE FEET and rotate ADJUSTABLE FEET to fine tune position and tilt.

3 To shorten ADJUSTABLE FEET, lift front of a projector and pull and undo FEET LOCK LATCHES.

Position and keystone distortion of image can be adjusted using Menu Operation. (Refer to P 18 and 35.)

ADJUSTABLE FEET   FEET LOCK LATCHES
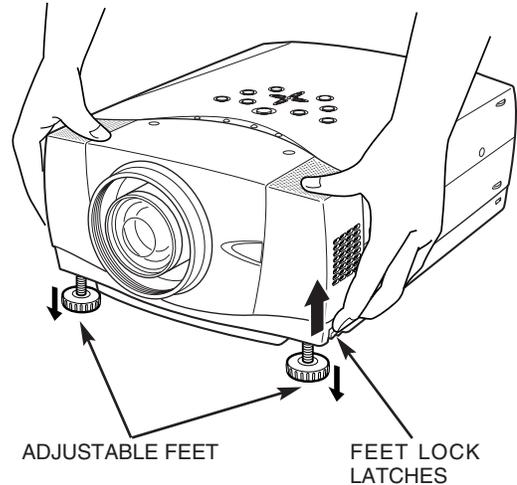
⚠ NOTE :
THIS PROJECTOR SHOULD BE SET IN THE WAY INDICATED. PROJECTION LAMP MAY MALFUNCTION.

MOVING PROJECTOR

Use Carry Handle when moving a Projector.
When moving a projector, replace lens cover and retract feet to prevent damage to lens and cabinet.
When this projector is not in use for an extended period, put it into case (dust cover).
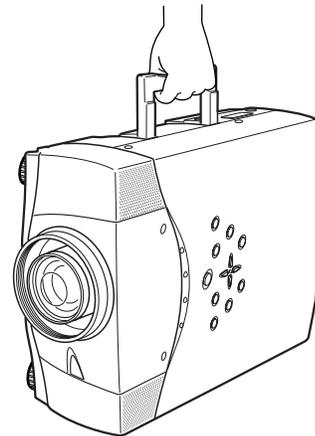
⚠ **CAUTION IN CARRYING OR TRANSPORTING A PROJECTOR**

● Do not drop or bump a projector, otherwise damages or malfunctions may result.
● When carrying a projector, use a suitable carrying case.
● Do not transport a projector by using a courier or transport service in an unsuitable transport case. This may cause damage to a projector. To transport a projector through a courier or transport service, consult your dealer for best way.

CONNECTING PROJECTOR

TERMINALS OF PROJECTOR

This projector has input and output terminals on its back for connecting computers and video equipment. Refer to figures on pages 11 to 13 and connect properly.

COMPUTER AUDIO INPUT (1 and 2) JACKS

Connect an audio output (stereo) from computer to these jacks.
(Refer to P12.)

COMPUTER INPUT TERMINALS (DIGITAL/ANALOG)

Connect computer (digital/analog) output to one of these terminals.
(Refer to P12.)

INPUT 1

ANALOG   DIGITAL(DVI-D)   R/C JACK

AUDIO 1   RESET   AUDIO 2   CONTROL PORT

G   B   R   H/V   V

VIDEO/Y   Cb/Pb   Cr/Pr

INPUT 2

VIDEO/Y Cb/Pb   Cr/Pr   R–AUDIO–L   S–VIDEO

(MONO)

INPUT 3

CONTROL PORT CONNECTOR

When controlling this projector by computer, connect your computer to this terminal.
(Refer to P12.)

RESET BUTTON

This projector uses a micro processor to control this unit, and occasionally, this micro processor may malfunction and need to be reset. This can be done by pressing RESET button with a pen, which will shut down and restart unit. Do not use RESET function excessively.

✽ Do not press this button. This button is used for our optional accessories.

5 BNC INPUT JACKS

Connect component video output (Y, Cb, Cr or Y, Pb, Pr) from video equipment to VIDEO/Y, Cb/Pb and Cr/Pr jacks or connect computer output {5 BNC Type (Green, Blue, Red, Horiz. Sync and Vert. Sync.)} from computer to G, B, R, H/V and V jacks.
(Refer to P12 and 13.)

VIDEO INPUT JACKS

Connect composite video output from video equipment to VIDEO/Y jack or connect component video outputs to VIDEO/Y, Cb/Pb and Cr/Pr jacks. (Refer to P13.)

AUDIO INPUT JACKS

Connect an audio output from video equipment to these jacks.
(Refer to P13.)

S-VIDEO INPUT JACK

Connect S-VIDEO output from video equipment to this jack. (Refer to P13.)

CONNECTING TO COMPUTER

Cables used for connection (∗ = Cable or adapter is not supplied with this projector.)

- VGA Cable (HDB 15 pin)
- DVI-Digital Cable (for Single Link T.M.D.S.) ∗
- BNC Cable ∗
- Control Cable for Serial Port

- MAC Adapter (When connecting to Macintosh computer) ∗
- Audio Cable {Mini Plug (stereo) x 1} ∗

IBM-compatible computer or Macintosh computer (VGA / SVGA / XGA / SXGA)

Desktop type   Laptop type

Monitor Output   Monitor Output   Audio Output   Serial port

MAC Adapter ∗
Set slide switches according to chart below.

BNC Cable ∗

VGA Cable

DVI Cable ∗

Audio Cable ∗ (stereo)

Control Cable for Serial Port

Terminal

COMPUTER AUDIO IN 1 or 2   CONTROL PORT

COMPUTER IN ANALOG   COMPUTER IN DIGITAL

INPUT 1
ANALOG   DIGITAL (DVI-D)   R/C JACK

AUDIO 1   RESET   AUDIO 2   CONTROL PORT

G   B   R   H/V   V
VIDEO/Y   Cb/Pb   Cr/Pr
INPUT 2

VIDEO/Y Cb/Pb   Cr/Pr   R–AUDIO–L   S–VIDEO
(MONO)
INPUT 3

Terminals of a Projector

◆ **MAC ADAPTER** ∗

Set switches as shown in table below depending on RESOLUTION MODE that you want to use before you turn on projector and computer.
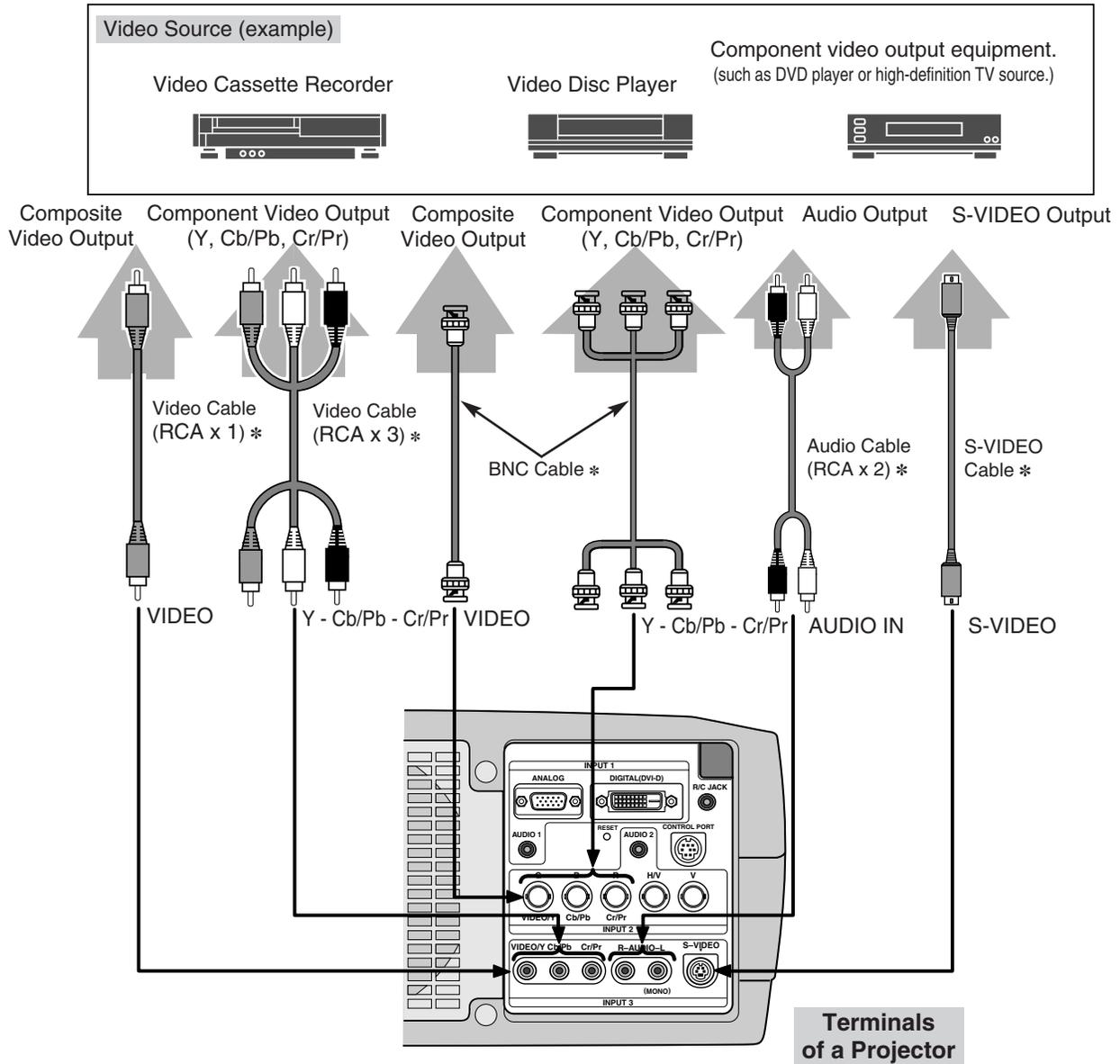
ON

OFF

	1	2	3	4	5	6
13" MODE (640 x 480)	ON	ON	OFF	OFF	OFF	OFF
16" MODE (832 x 624)	OFF	ON	OFF	ON	OFF	OFF
19" MODE (1024 x 768)	OFF	ON	ON	OFF	OFF	OFF
21" MODE (1152 x 870)	ON	ON	ON	ON	OFF	OFF

NOTE :
When connecting cable, power cords of both a projector and external equipment should be disconnected from AC outlet. Turn a projector and peripheral equipment on before computer is switched on.

CONNECTING TO VIDEO EQUIPMENT

Cables used for connection (∗ = Cable is not supplied with this projector.)

• Video Cable (RCA x 1) ∗, or (RCA x 3) ∗

• BNC Cable ∗
• S-VIDEO Cable ∗
• Audio Cable (RCA x 2) ∗

Video Source (example)

Video Cassette Recorder   Video Disc Player

Component video output equipment.
(such as DVD player or high-definition TV source.)

Composite   Component Video Output   Composite   Component Video Output   Audio Output   S-VIDEO Output
Video Output   (Y, Cb/Pb, Cr/Pr)   Video Output   (Y, Cb/Pb, Cr/Pr)

Video Cable   Video Cable   Audio Cable   S-VIDEO
(RCA x 1) ∗   (RCA x 3) ∗   (RCA x 2) ∗   Cable ∗

BNC Cable ∗

VIDEO   Y - Cb/Pb - Cr/Pr   VIDEO   Y - Cb/Pb - Cr/Pr   AUDIO IN   S-VIDEO

INPUT 1
ANALOG   DIGITAL(DVI-D)   R/C JACK

RESET   CONTROL PORT
AUDIO 1   AUDIO 2

H/V   V

VIDEO/Y   Cb/Pb   Cr/Pr
INPUT 2
VIDEO/Y Cb/Pb   Cr/Pr   R–AUDIO–L   S–VIDEO

(MONO)
INPUT 3

**Terminals
of a Projector**

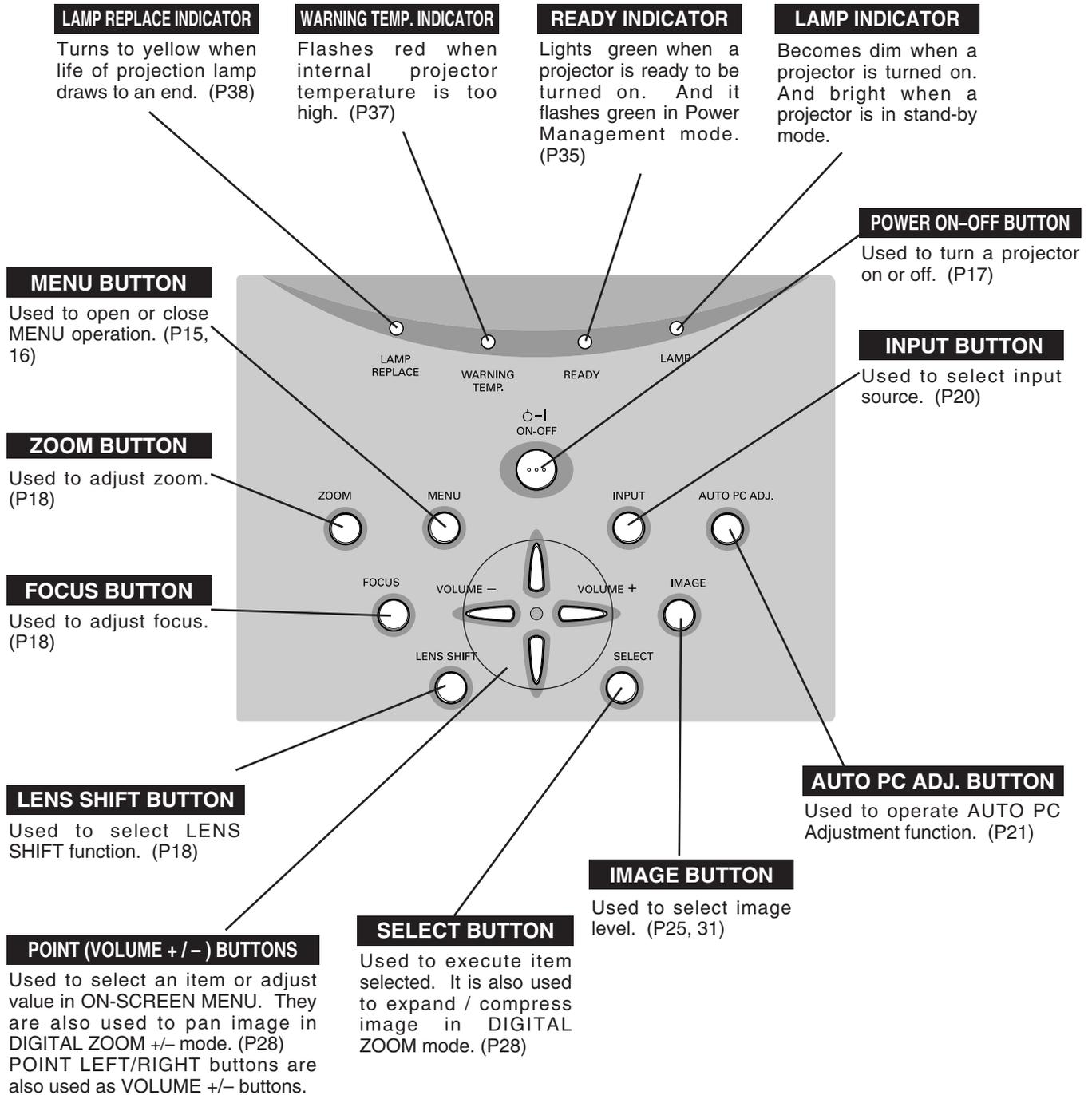⚠ NOTE :
When connecting cable, power cords of
both a projector and external equipment
should be disconnected from AC outlet.

TOP CONTROLS AND INDICATORS

This projector has CONTROL BUTTONS (TOP CONTROLS) and INDICATORS on its top.

LAMP REPLACE INDICATOR

Turns to yellow when life of projection lamp draws to an end. (P38)

WARNING TEMP. INDICATOR

Flashes red when internal projector temperature is too high. (P37)

READY INDICATOR

Lights green when a projector is ready to be turned on. And it flashes green in Power Management mode. (P35)

LAMP INDICATOR

Becomes dim when a projector is turned on. And bright when a projector is in stand-by mode.

POWER ON–OFF BUTTON

Used to turn a projector on or off. (P17)

MENU BUTTON

Used to open or close MENU operation. (P15, 16)

INPUT BUTTON

Used to select input source. (P20)

ZOOM BUTTON

Used to adjust zoom. (P18)

FOCUS BUTTON

Used to adjust focus. (P18)

LAMP
REPLACE

WARNING
TEMP.

READY

LAMP

ON-OFF

ZOOM   MENU

INPUT   AUTO PC ADJ.

FOCUS   VOLUME –   VOLUME +   IMAGE

LENS SHIFT   SELECT

LENS SHIFT BUTTON

Used to select LENS SHIFT function. (P18)

AUTO PC ADJ. BUTTON

Used to operate AUTO PC Adjustment function. (P21)

IMAGE BUTTON

Used to select image level. (P25, 31)

SELECT BUTTON

Used to execute item selected. It is also used to expand / compress image in DIGITAL ZOOM mode. (P28)

POINT (VOLUME + / –) BUTTONS

Used to select an item or adjust value in ON-SCREEN MENU. They are also used to pan image in DIGITAL ZOOM +/– mode. (P28) POINT LEFT/RIGHT buttons are also used as VOLUME +/– buttons.

OPERATING ON-SCREEN MENU

HOW TO OPERATE ON-SCREEN MENU

You can control and adjust this projector through ON-SCREEN MENU. Refer to following pages to operate each adjustment on ON-SCREEN MENU.

TOP CONTROL

1 DISPLAY MENU

Press MENU button to display ON-SCREEN MENU.

POINT BUTTONS
Used to move Pointer UP/ DOWN/ RIGHT/ LEFT.

2 MOVING POINTER

Move pointer (✱ see below) or adjust value of item by pressing POINT button(s) on Top Control.

✱ Pointer is icon on ON-SCREEN MENU to select item. See figures on section "FLOW OF ON-SCREEN MENU OPERATION" below.

SELECT BUTTON
Used to select item.

3 SELECT ITEM

Select item or set selected function by pressing SELECT button.

FLOW OF ON-SCREEN MENU OPERATION

Display ON-SCREEN MENU

1 Press MENU button to display ON-SCREEN MENU (MENU BAR). A red frame is POINTER.

Select Menu to be adjusted

2 Move POINTER (red frame) to MENU ICON that you want to select by pressing POINT RIGHT / LEFT buttons.

Control or adjust item through ON-SCREEN MENU

3 Press POINT DOWN button and move POINTER (red frame or red arrow) to ITEM that you want to adjust, and then press SELECT button to show ITEM DATA.

4 Adjust ITEM DATA by pressing POINT RIGHT / LEFT buttons.
Refer to following pages for details of respective adjustments.

MENU BAR

MENU ICON

Contrast   SVGA 1

POINTER (red frame)
Press POINT DOWN button to move POINTER.

POINTER (red frame)

ITEM

SELECT BUTTON

32

32

Mid

32

32

32

ITEM DATA
Press POINT LEFT/RIGHT buttons to adjust value or set function.

BEFORE OPERATION
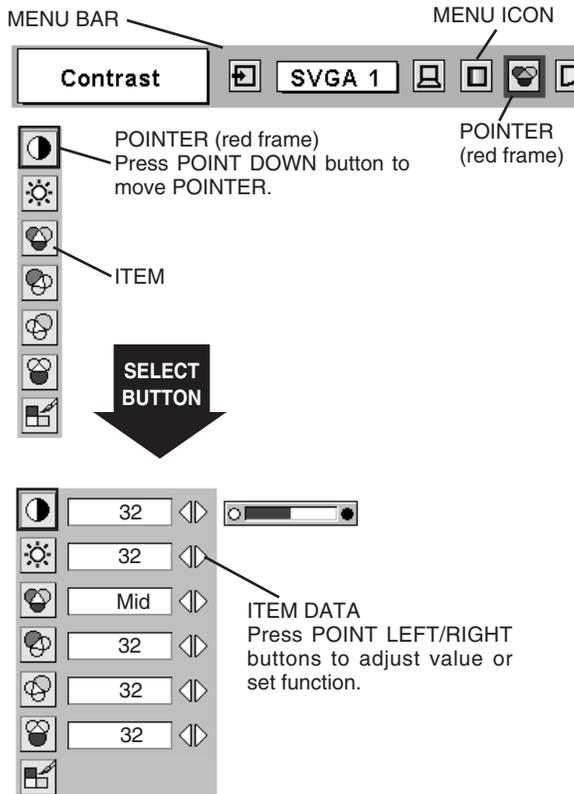
MENU BAR

FOR PC SOURCE   Press MENU BUTTON while connecting to PC input source.

IMAGE SELECT MENU
Used to select image level among Standard, Real and Image 1 ~ 4. (Refer to P25)

SCREEN MENU
Used to adjust size of image. [Normal / Full / True / Digital zoom +/–] (Refer to P28)

SETTING MENU
Used to change settings of projector or reset Lamp Replace Counter. (Refer to P35, 36)

GUIDE WINDOW
Shows selected item of ON-SCREEN MENU.

PC SYSTEM MENU
Used to select computer system. (Refer to P20, 21)

Input   SVGA 1

INPUT MENU
Used to select input source (Input 1, Input 2 or Input 3). (Refer to P20)

PC ADJUST MENU
Used to adjust parameters to match with input signal format. (Refer to P21-23)

IMAGE ADJUST MENU
Used to adjust computer image. [Contrast / Brightness / Color temp. / White Balance (R/G/B) / Color management / Auto picture control / Gamma] (Refer to P26-27)

SOUND MENU
Used to adjust volume or mute sound. (Refer to P19)

FOR VIDEO SOURCE   Press MENU BUTTON while connecting to VIDEO input source.

INPUT MENU
Used to select input source (Input 1, Input 2 or Input 3). (Refer to P29)

IMAGE SELECT MENU
Used to select image level among Standard, Cinema and Image 1 ~ 4. (Refer to P31)

SCREEN MENU
Used to set size of image to Full, Zoom, Normal or Wide zoom. (Refer to P34)

Input   Auto

Same function as Menu for PC source.

AV SYSTEM MENU
Used to select system of selected video source. (Refer to P30)

IMAGE ADJUST MENU
Used to adjust picture image. [Contrast / Brightness / Color / Tint / Color management / Auto picture control / Color temp. / White balance (R/G/B) / Sharpness / Gamma / Noise Reduction / Progressive] (Refer to P32-34)

Same function as Menu for PC source.

16

TURNING ON / OFF PROJECTOR

TURNING ON PROJECTOR

1 Complete peripheral connections (with Computer, VCR, etc.) before turning on projector. (Refer to "CONNECTING TO PROJECTOR" on pages 11~13 for connecting that equipment.)

2 Connect a projector's AC Power Cord into an AC outlet. LAMP Indicator lights RED, and READY Indicator lights GREEN.

   NOTE : When "On start" function is ON, this projector is turned on automatically by connecting AC Power Cord to an AC outlet. (Refer to pages 35, 36.)

3 Press POWER ON-OFF button on Top Control to ON. LAMP Indicator dims, and Cooling Fans start to operate. Preparation Display appears on a screen and count-down starts. Signal from PC or Video source appears after 30 seconds.
Current Input position is also displayed on screen for 5 seconds.

Input position

Input 1

30
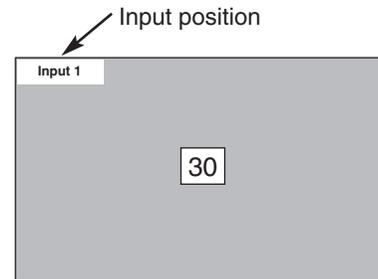
Preparation Display disappears after 30 seconds.

TURNING OFF PROJECTOR

1 Press POWER ON-OFF button on Top Control, and a message "Power off?" appears on a screen.

2 Press POWER ON-OFF button again to turn off projector. LAMP Indicator lights bright and READY Indicator turns off. After projector is turned off, Cooling Fans operate (for 90 seconds). During this "Cooling Down" period, this appliance cannot be turned on.

3 When projector has cooled down, READY Indicator lights GREEN again and you can turn projector on. After cooling down completely, disconnect AC Power Cord.

Power off?
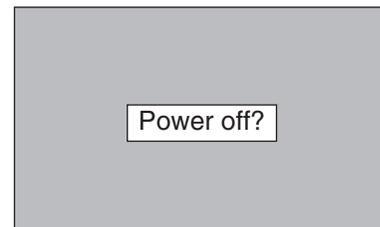
Message disappears after 4 seconds.

⚠ TO MAINTAIN LIFE OF LAMP, ONCE YOU TURN PROJECTOR ON, WAIT AT LEAST 5 MINUTES BEFORE TURNING IT OFF.

When "Power Management" function is ON, projector detects signal interruption and turns off Projection Lamp automatically. Refer to "Power Management" on page 35.

When WARNING TEMP. Indicator flashes red, projector is automatically turned off. Wait at least 5 minutes before turning on projector again.
When WARNING TEMP. Indicator continues to flash, follow procedures below:
1. Press POWER ON-OFF button to turn a projector off and disconnect AC Power Cord from an AC outlet.
2. Check Air Filters for dust accumulation.
3. Clean Air Filters. (See "AIR FILTER CARE AND CLEANING" section on page 37.)
4. Turn a projector on again.

If WARNING TEMP. Indicator should still continue to flash, contact sales dealer where you purchased this projector or service center.

BASIC OPERATION

ADJUSTING SCREEN

ZOOM ADJUSTMENT

1 Press ZOOM button on Top Control. Message "Zoom" is displayed.

2 Press POINT UP button to make image larger, and press POINT DOWN button to make image smaller.

Zoom
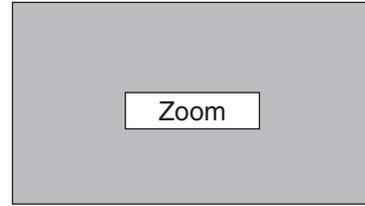
Message disappears after 4 seconds.

FOCUS ADJUSTMENT

1 Press FOCUS button on Top Control. Message "Focus" is displayed.

*2* Adjust focus of image by pressing POINT UP/DOWN button(s) .

NOTE;
Focus adjustment may not function properly if the image is corrected by KEYSTONE adjustment.

Focus
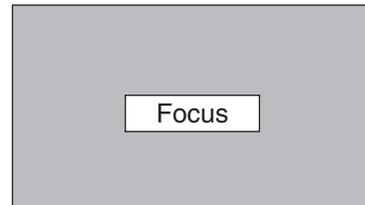
Message disappears after 4 seconds.

LENS SHIFT ADJUSTMENT

1 Press LENS SHIFT button on Top Control. Message "Lens shift" is displayed.

2 Press POINT UP button to move image up, press POINT DOWN button to move image down.

Lens shift
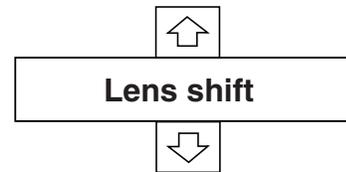
KEYSTONE ADJUSTMENT

If a projected picture has keystone distortion, correct the image with KEYSTONE adjustment.

1 Select Keystone on SETTING menu. (Refer to page 35.) Keystone dialog box appears.

2 Correct keystone distortion by pressing POINT UP/DOWN/LEFT/RIGHT button(s). Press POINT UP button to reduce the upper part of the image, and press POINT DOWN button to reduce the lower part. Press POINT LEFT button to reduce the left part, and press POINT RIGHT button to reduce the right part.

Keystone

• Arrows are white in no correction.
• Arrow(s) of direction being corrected turn(s) red.
• Arrow(s) disappear(s) at the maximum correction.

Reduce the upper width with POINT UP button.
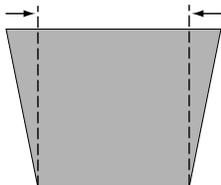
Reduce the lower width with POINT DOWN button.
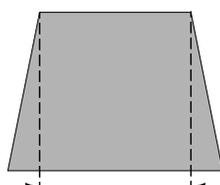
Reduce the left part with POINT LEFT button.
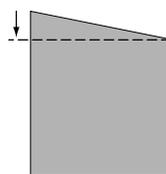
Reduce the right part with POINT RIGHT button.

18
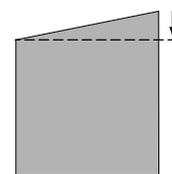
SOUND ADJUSTMENT

DIRECT OPERATION

Indicates roughly level of volume.

Volume

Press VOLUME (+/–) button(s) on Top Control to adjust volume. Volume dialog box appears on screen for a few seconds.
(+) button to increase volume, and (–) button for decreasing.

• ▬▬ ⬜	•)))
◀|| Volume	**15**
◀ Mute	**Off**
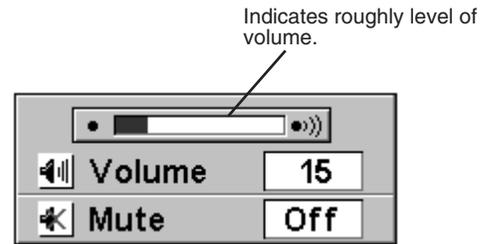
Display disappears after 4 seconds.

MENU OPERATION

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT buttons to move a red frame pointer to SOUND Menu icon.

2 Press POINT DOWN button to move a red frame pointer to item that you want to select, and then press SELECT button.

◀|| Volume

To increase volume, press POINT RIGHT button, and press POINT LEFT button for decreasing.

◀ Mute

Press POINT LEFT/RIGHT button(s) to cut off sound. Dialog box display is changed to "On" and sound is cut off. To restore sound to its previous level, press POINT LEFT/RIGHT button(s) again.

SOUND MENU

Volume	⊡	Auto	⬜	◉	⬜	◀||

◀|| 　15　◁▷　　•▬▬　⬜•))　　SOUND Menu icon

◀　Off　◁▷

Indicates roughly level of volume.

Close SOUND Menu.

COMPUTER INPUT
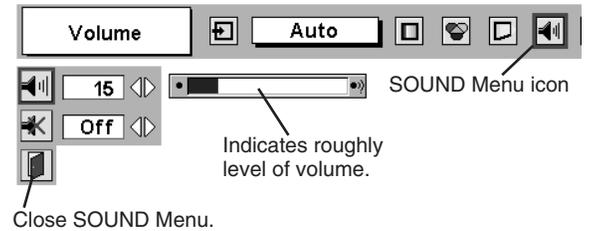
SELECTING INPUT SOURCE

DIRECT OPERATION

Choose Input by pressing INPUT button on Top Control.
If projector cannot reproduce proper image, select correct input source through MENU OPERATION (see below).

INPUT button
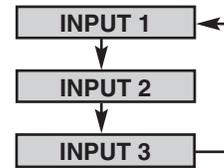
INPUT 1
↓
INPUT 2
↓
INPUT 3

MENU OPERATION

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT buttons to select Input and press SELECT button. Another dialog box INPUT SELECT Menu will appear.

2 Press POINT DOWN button and a red-arrow icon will appear. Move arrow to INPUT source that you want to select, and then press SELECT button.
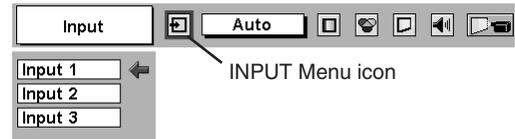
INPUT Menu icon

SELECTING COMPUTER SYSTEM

WHEN SELECT INPUT 1 (COMPUTER INPUT TERMINALS)

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button to move a red frame pointer to INPUT Menu icon.

2 Press POINT DOWN button to move a red arrow pointer to Input 1 and then press SELECT button. Source Select Menu will appear.

3 Move a pointer to either Digital or Analog and then press SELECT button.

| Digital | When your computer is connected to COMPUTER INPUT (DIGITAL) terminal, select RGB (Digital). |

| Analog | When your computer is connected to COMPUTER INPUT (ANALOG) terminal, select RGB (Analog). |

INPUT MENU

INPUT Menu icon

Move a pointer (red arrow) to Input 1 and press SELECT button.

Source Select Menu
Move a pointer to Digital or Analog and press SELECT button.
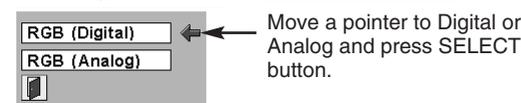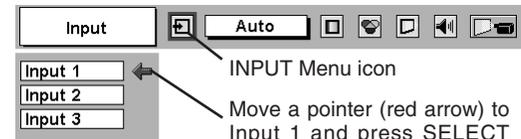
WHEN SELECT INPUT 2 (5 BNC INPUT JACKS)

When connect a computer output [5 BNC Type (Green, Blue, Red, Horiz. Sync and Vert. Sync.)] from a computer to G, B, R, H/HV and V jacks.
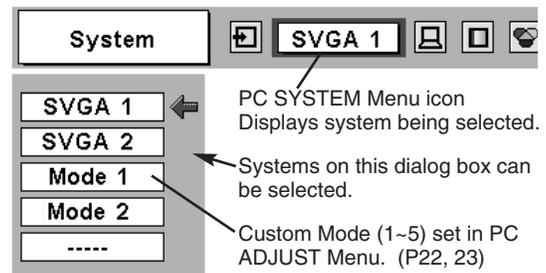
1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button to move a red frame pointer to INPUT Menu icon.

2 Press POINT DOWN button to move a red arrow pointer to Input 2 and then press SELECT button. Source Select Menu will appear.

3 Press POINT DOWN button and a red-arrow icon will appear. Move arrow to "RGB", and then press SELECT button.

INPUT MENU

INPUT Menu icon

Move a pointer (red arrow) to Input 2 and press SELECT button.

Source Select Menu
Move a pointer to RGB and press SELECT button.
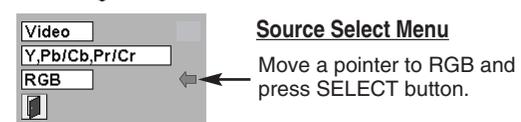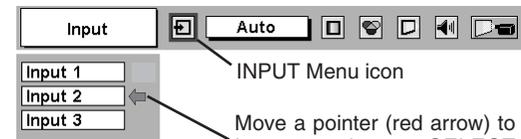
AUTOMATIC MULTI-SCAN SYSTEM

This projector automatically tunes to most different types of computers based on VGA, SVGA, XGA or SXGA (refer to "COMPATIBLE COMPUTER SPECIFICATION" on page 24). When selecting Computer, this projector automatically tunes to incoming signal and projects proper image without any special setting. (Some computers need setting manually.)

Note : Projector may display one of following messages.

| Auto |

When projector cannot recognize connected signal as PC system provided in this projector, Auto PC Adjustment function operates to adjust projector and message "Auto" is displayed on SYSTEM Menu icon.
When image is not provided properly, manual adjustment is required. (Refer to P22 and 23.)

PC SYSTEM MENU

| System | Auto |

PC SYSTEM Menu icon
Displays system being selected.

| ──── |

There is no signal input from computer. Make sure connection of computer and a projector is set correctly. (Refer to TROUBLESHOOTING on page 40.)

| D-VGA, D-SVGA or D-XGA |

When digital computer signal is received on DVI terminal, above message is displayed on PC SYSTEM Menu icon.

PC SYSTEM MENU

SELECT COMPUTER SYSTEM MANUALLY

This projector automatically selects PC system among those provided in this projector and PC system can be also selected manually.

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT buttons to move a red frame pointer to PC SYSTEM Menu icon.

2 Press POINT DOWN button to move a red arrow pointer to system that you want to set, and then press SELECT button.

| System | SVGA 1 |
| SVGA 1 |
| SVGA 2 |
| Mode 1 |
Mode 2
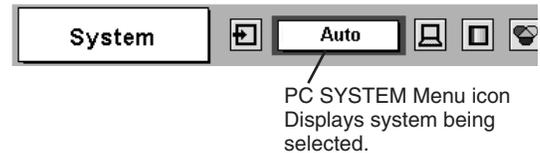
PC SYSTEM Menu icon
Displays system being selected.

Systems on this dialog box can be selected.

Custom Mode (1~5) set in PC ADJUST Menu. (P22, 23)

PC ADJUSTMENT

AUTO PC ADJUSTMENT

Auto PC Adjustment function is provided to automatically adjust Fine sync, Total dots and Picture Position to conform to your computer. Auto PC Adjustment function can be operated as follows.

| Auto PC Adj. |

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button to move a red frame pointer to PC ADJUST Menu icon.

2 Press POINT DOWN button to move a red frame pointer to AUTO PC Adj. icon and then press SELECT button twice.
This Auto PC Adjustment can be also executed by pressing AUTO PC ADJ. button on Top Control.

PC ADJUST MENU

| Auto PC Adj. | SVGA 1 |

PC ADJUST Menu icon

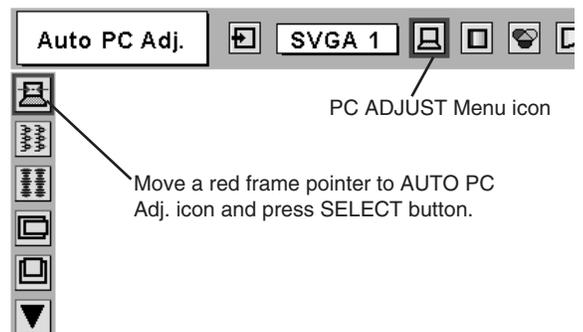Move a red frame pointer to AUTO PC Adj. icon and press SELECT button.

Store adjustment parameters.
Adjustment parameters from Auto PC Adjustment can be memorized in this projector. Once parameters are memorized, setting can be done just by selecting Mode in PC SYSTEM Menu (P21). Refer to step 3 of MANUAL PC ADJUSTMENT section (P23).

NOTE

● Fine sync, Total dots and Picture Position of some computers can not be fully adjusted with this Auto PC Adjustment function. When image is not provided properly through this function, manual adjustments are required. (Refer to page 22, 23.)

● Auto PC Adjustment function cannot be operated in Digital Signal input on DVI terminal and "RGB", "720p (HDTV)", "1035i (HDTV)" or "1080i (HDTV)" is selected on PC SYSTEM Menu.

MANUAL PC ADJUSTMENT

This projector can automatically tune to display signals from most personal computers currently distributed. However, some computers employ special signal formats which are different from standard ones and may not be tuned by Multi-Scan system of this projector. If this happens, projector cannot reproduce a proper image and image may be recognized as a flickering picture, a non-synchronized picture, a non-centered picture or a skewed picture.

This projector has a Manual PC Adjustment to enable you to precisely adjust several parameters to match with those special signal formats. This projector has 5 independent memory areas to memorize those parameters manually adjusted. This enables you to recall setting for a specific computer whenever you use it.

Note : This PC ADJUST Menu cannot be operated when in digital signal input on DVI terminal and "RGB" is selected on PC SYSTEM MENU (P21).

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button to move a red frame pointer to PC ADJUST Menu icon.

2 Press POINT DOWN button to move a red frame pointer to item that you want to adjust and then press SELECT button. Adjustment dialog box will appear. Press POINT LEFT/RIGHT button to adjust value.

Fine sync

Adjusts an image as necessary to eliminate flicker from display. Press POINT LEFT/RIGHT button to adjust value.(From 0 to 31.)

Total dots

Number of total dots in one horizontal period. Press POINT LEFT/RIGHT button(s) and adjust number to match your PC image.

Horizontal

Adjusts horizontal picture position. Press POINT LEFT/RIGHT button(s) to adjust position.

Vertical

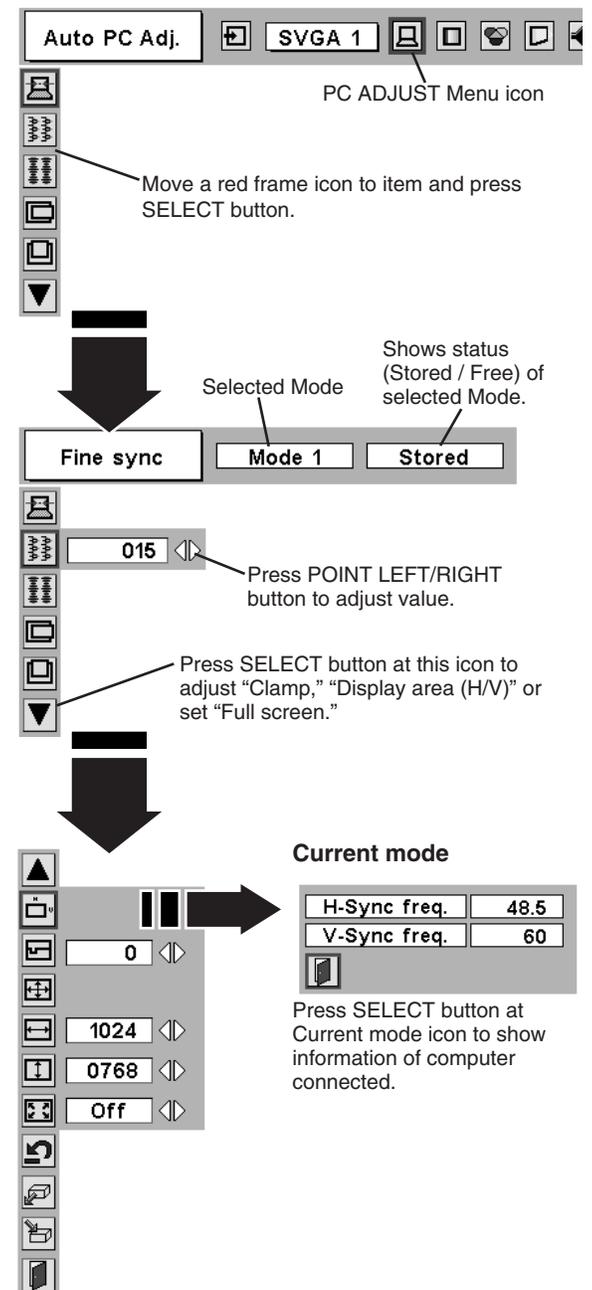Adjusts vertical picture position. Press POINT LEFT/RIGHT button(s) to adjust position.

Current mode

Press SELECT button to show information of computer selected.

Clamp

Adjusts clamp position. When image has a dark bar(s), try this adjustment.

PC ADJUST MENU

PC ADJUST Menu icon

Move a red frame icon to item and press SELECT button.

Shows status (Stored / Free) of selected Mode.

Selected Mode

Press POINT LEFT/RIGHT button to adjust value.

Press SELECT button at this icon to adjust "Clamp," "Display area (H/V)" or set "Full screen."

Current mode

| H-Sync freq. | 48.5 |
| V-Sync freq. | 60 |

Press SELECT button at Current mode icon to show information of computer connected.

Display area

Selects area displayed with this projector. Select resolution at Display area dialog box.

Display area H

Adjustment of horizontal area displayed with this projector. Press POINT LEFT/RIGHT button(s) to decrease/increase value and then press SELECT button.

Display area V

Adjustment of vertical area displayed with this projector. Press POINT LEFT/RIGHT button(s) to decrease/increase value and then press SELECT button.

Full screen

Press POINT LEFT/RIGHT button(s) to switch Full screen function to "On" or "Off." Set "On" to resize image to fit the horizontal size of the screen.

NOTE : Display area (H/V) and Full screen cannot be adjusted when "1035i (HDTV)" or "1080i (HDTV)" is selected on PC SYSTEM Menu (P21).

3 **Store**

To store adjustment parameters, move a red frame pointer to Store icon and then press SELECT button. Move a red arrow pointer to any of Mode 1 to 5 that you want to store and then press SELECT button.

Mode free

To clear adjustment parameters previously set, move a red frame pointer to Mode free icon and then SELECT button. Move a red arrow pointer to Mode that you want to clear and then press SELECT button.

Other icons operates as follows.

Reset

Reset all adjust parameters on adjustment dialog box to previous figure.
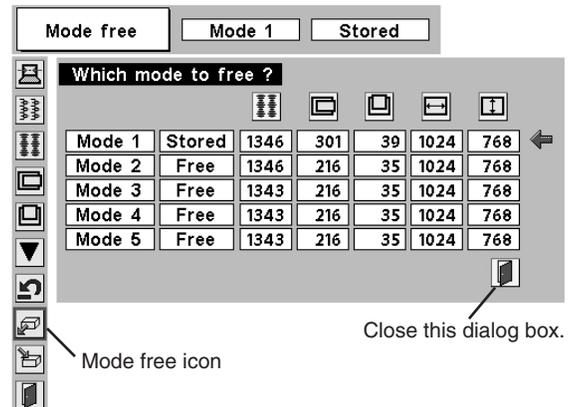
Quit

Closes PC ADJUST MENU.

Press SELECT button at Display area icon and Display area dialog box appears.

Display area

640x 480
720x 400
800x 600
1024x 768
1152x 864
1280x1024
1366x 768

Press POINT LEFT /RIGHT button(s) to adjust value and then press SELECT button.
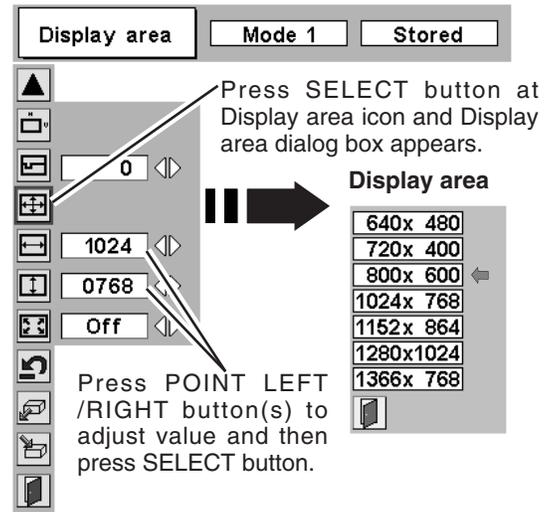
To store adjustment data.

This Mode has parameters being stored.

Vacant Mode

Shows values of "Total dots," "Horizontal," "Vertical," "Display area H," and "Display area V."

Store icon

To clear adjustment data.

Close this dialog box.

Mode free icon
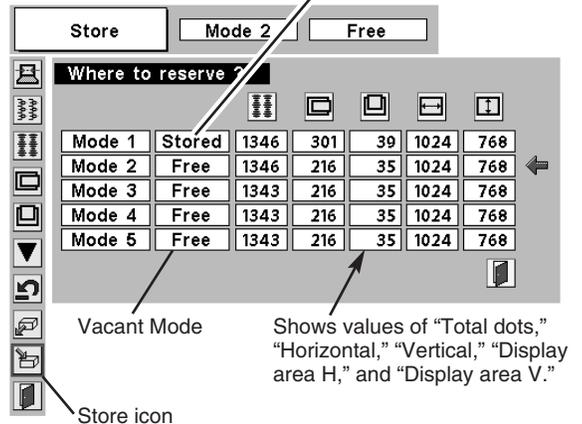
COMPATIBLE COMPUTER SPECIFICATIONS

Basically this projector can accept a signal from all computers with V, H-Frequency mentioned below and less than 140 MHz of Dot Clock.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)	ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
VGA 1	640 x 480	31.47	59.88	XGA 10	1024 x 768	62.04	77.07
VGA 2	720 x 400	31.47	70.09	XGA 11	1024 x 768	61.00	75.70
VGA 3	640 x 400	31.47	70.09	XGA 12	1024 x 768 (Interlace)	35.522	43.48
VGA 4	640 x 480	37.86	74.38	XGA 13	1024 x 768	46.90	58.20
VGA 5	640 x 480	37.86	72.81	XGA 14	1024 x 768	47.00	58.30
VGA 6	640 x 480	37.50	75.00	XGA15	1024 x 768	58.03	72.0
VGA 7	640 x 480	43.269	85.00	MAC 19	1024 x 768	60.24	75.08
MAC LC13	640 x 480	34.97	66.60	MAC 21	1152 x 870	68.68	75.06
MAC 13	640 x 480	35.00	66.67	SXGA 1	1152 x 864	64.20	70.40
RGB	(Interlace)	15.734	30	SXGA 2	1280 x 1024	62.50	58.60
RGB	(Interlace)	15.625	25	SXGA 3	1280 x 1024	63.90	60.00
SVGA 1	800 x 600	35.156	56.25	SXGA 4	1280 x 1024	63.34	59.98
SVGA 2	800 x 600	37.88	60.32	SXGA 5	1280 x 1024	63.74	60.01
SVGA 3	800 x 600	46.875	75.00	SXGA 6	1280 x 1024	71.69	67.19
SVGA 4	800 x 600	53.674	85.06	SXGA 7	1280 x 1024	81.13	76.107
SVGA 5	800 x 600	48.08	72.19	SXGA 8	1280 x 1024	63.98	60.02
SVGA 6	800 x 600	37.90	61.03	SXGA 9	1280 x 1024	79.976	75.025
SVGA 7	800 x 600	34.50	55.38	SXGA 10	1280 x 960	60.00	60.00
SVGA 8	800 x 600	38.00	60.51	SXGA 11	1152 x 900	61.20	65.20
SVGA 9	800 x 600	38.60	60.31	SXGA 12	1152 x 900	71.40	75.60
SVGA 10	800 x 600	32.70	51.09	SXGA 13	1280 x 1024 (Interlace)	50.00	43.00
SVGA 11	800 x 600	38.00	60.51	SXGA 14	1280 x 1024 (Interlace)	50.00	47.00
MAC 16	832 x 624	49.72	74.55	SXGA 15	1280 x 1024	63.37	60.01
XGA 1	1024 x 768	48.36	60.00	SXGA 16	1280 x 1024	76.97	72.00
XGA 2	1024 x 768	68.677	84.997	SXGA 17	1152 x 900	61.85	66.00
XGA 3	1024 x 768	60.023	75.03	SXGA 18	1280 x 1024 (Interlace)	46.43	43.35
XGA 4	1024 x 768	56.47	70.07	SXGA 19	1280 x 1024	63.79	60.18
XGA 5	1024 x 768	60.31	74.92	MAC	1280 x 960	75.00	75.08
XGA 6	1024 x 768	48.50	60.02	MAC	1280 x 1024	80.00	75.08
XGA 7	1024 x 768	44.00	54.58	720p (HDTV)	(Progressive)	45.00	60.00
XGA 8	1024 x 768	63.48	79.35	1035i (HDTV)	(Interlace)	33.75	30.00
XGA 9	1024 x 768 (Interlace)	36.00	43.59	1080i (HDTV)	(Interlace)	33.75	30.00

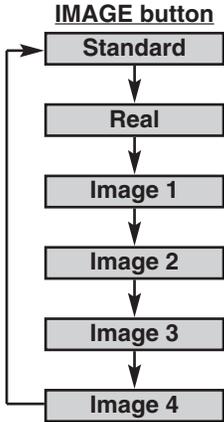When a input signal is digital from DVI terminal, refer to chart below.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)	ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
D-VGA	640 x 480	31.469	59.940	D-XGA	1024 x 768	48.363	60.004
D-SVGA	800 x 600	37.879	60.317				

NOTE : Specifications are subject to change without notice.

PICTURE IMAGE ADJUSTMENTS

IMAGE LEVEL SELECT (DIRECT)

Select image level among Standard, Real, Image 1, Image 2, Image 3 and Image 4 by pressing IMAGE button on Top Control.
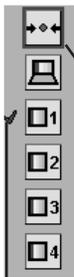
Standard

Normal picture level preset on this projector.

Real

Picture level with improved halftone for graphics.

IMAGE 1~4

User preset picture adjustment in IMAGE ADJUST Menu (P26-27).

IMAGE button

| Standard |
| Real |
| Image 1 |
| Image 2 |
| Image 3 |
| Image 4 |

IMAGE LEVEL SELECT (MENU)

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button to move a red frame pointer to IMAGE SELECT Menu icon.

2 Press POINT DOWN button to move a red frame pointer to level that you want to set and then press SELECT button.

Standard

Normal picture level preset on this projector.

Real

Picture level with improved halftone for graphics.

IMAGE 1~4

User preset picture adjustment in IMAGE ADJUST Menu (P26-27).

IMAGE SELECT MENU

| Standard | 🔁 | SVGA 1 | 🖳 🔲 🕶 |

IMAGE SELECT Menu icon

Move a red frame icon to level and press SELECT button.

Level being selected.

COMPUTER INPUT

IMAGE LEVEL ADJUSTMENT

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT buttons to move a red frame pointer to IMAGE ADJUST Menu icon.

2 Press POINT DOWN button to move a red frame pointer to item that you want to adjust and then press SELECT button. Level of each item is displayed. Adjust each level by pressing POINT LEFT/RIGHT button(s).

Contrast

Press POINT LEFT button to decrease contrast, and POINT RIGHT button to increase contrast. (From 0 to 63.)

Brightness

Press POINT LEFT button to adjust image darker, and POINT RIGHT button to adjust brighter. (From 0 to 63.)

Color temp.

Press either POINT LEFT button or POINT RIGHT button to Color temp. level that you want to select. (XLow, Low, Mid or High)

White balance (Red)

Press POINT LEFT button to lighten red tone and POINT RIGHT button to deeper tone. (From 0 to 63.)

White balance (Green)

Press POINT LEFT button to lighten green tone and POINT RIGHT button to deeper tone. (From 0 to 63.)

White balance (Blue)

Press POINT LEFT button to lighten blue tone and POINT RIGHT button to deeper tone. (From 0 to 63.)

Color Management

The Color management function can be used to adjust the level, phase and gamma of the selected display colors on the screen, and to replace these colors with other colors if required.
The projector lets you replace up to eight colors for each image.
There are four preset images for VIDEO mode and four preset images for PC, giving a total of eight images.

1 Press the POINT DOWN button to move the red frame pointer to "COLOR MANAGEMENT", and then press the SELECT button. The COLOR MANAGEMENT menu will appear and pointer mode will be enabled. The image that was being projected when the button was pressed will be paused, and the COLOR MANAGEMENT POINTER will appear.

2 Use the POINT buttons to move the pointer to a section of the paused image that contains the color that you would like to adjust, and then press the SELECT button. The mode will change to COLOR SELECTION mode, and the color in the center of the pointer will be selected and adjustment will be possible.

3 Use the POINT buttons to adjust the level and phase of the color, and then press the SELECT button to confirm the setting. Next, use the POINT buttons to adjust the gamma correction for the color, and then press the SELECT button to accept the setting. When the SELECT button is pressed, the mode will change to LIST mode.

IMAGE ADJUST MENU
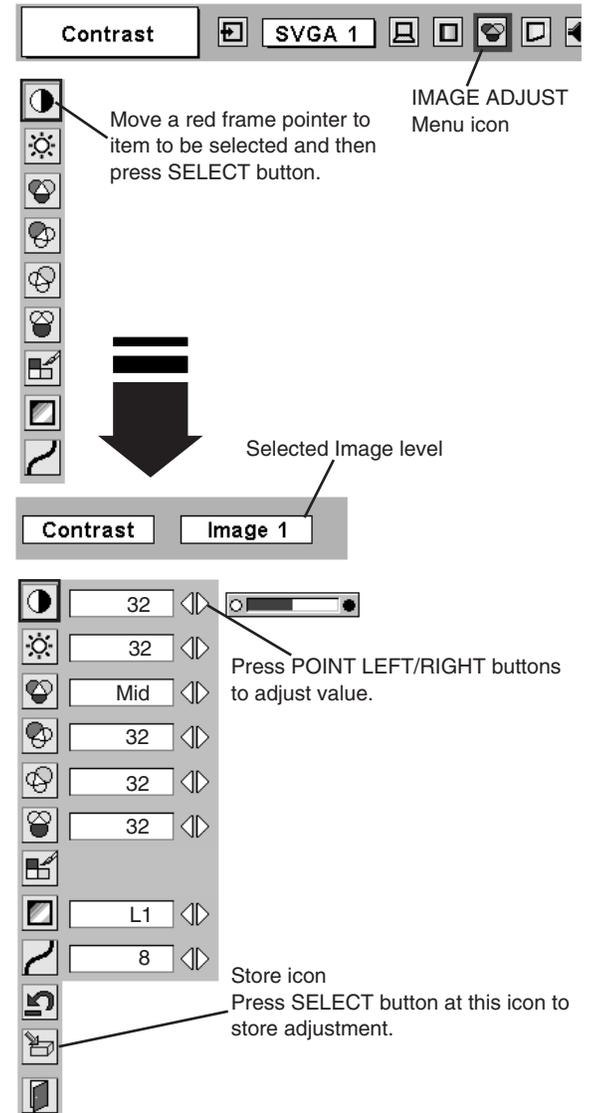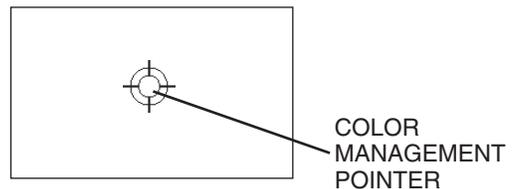
IMAGE ADJUST Menu icon

Move a red frame pointer to item to be selected and then press SELECT button.

Selected Image level

Contrast   Image 1

	32	
	32	
	Mid	
	32	
	32	
	32	
	L1	
	8	

Press POINT LEFT/RIGHT buttons to adjust value.

Store icon
Press SELECT button at this icon to store adjustment.

POINTER MODE

COLOR MANAGEMENT POINTER

4 To move the red frame pointer to "MENU", and then press the SELECT button. The message "OK"? is displayed. Move the pointer to [Yes] and then press SELECT button. The COLOR MANAGEMENT menu will be exited and the display will return to the IMAGE ADJUST menu. (At this time, the image will stop being paused and normal projection will resume.) After changing the COLOR MANAGEMENT settings, use the IMAGE ADJUST menu to store the changed settings.

COLOR SELECTION MODE

| CANCEL |

The mode will return to the pointer mode (even if you press the MENU key on the projector or the remote control). (You will need to reselect and re-adjust the color in this case.)

| QUIT |

The COLOR MANAGEMENT menu will be exited and the display will return to the normal projection screen, but any settings that have been changed will not be stored. To store the changed settings, be sure to select "LIST" using the POINT buttons and change to the next mode (LIST mode).

LIST MODE

| ✓ |

The check mark will be cleared and the effect of the setting adjustment for that line on the projected images will be momentarily canceled.

| COLOR PALETTE |

The mode will return to COLOR SELECTION mode so that you can re-adjust the setting for the color in that line. This option is not available if the check mark has been cleared by the operation immediately above.)

| DEL |

The setting adjustment for the color in that line will be canceled.

| ALL DEL |

The setting adjustment for the colors in all lines will be canceled.

| COLOR M. |

The mode will return to POINTER mode.

| Auto picture control |

Press either POINT LEFT button or POINT RIGHT button to Auto picture control position that you want to select . (Off, L1 or L2)
Off ······· Auto picture control OFF position.
L1 ········ Auto picture control LEVEL 1 position.
L2 ········ Auto picture control LEVEL 2 position.

| Gamma |

Press either POINT LEFT button or POINT RIGHT button to obtain better balance of contrast. (From 0 to 15.)

| Store |

To store manually preset image, move a red frame pointer to Store icon and press SELECT button. Image Level Menu will appear. Move a red frame pointer to Image 1 to 4 where you want to set and then press SELECT button.

Other icons operates as follows.

| Reset |

Reset all adjustment to previous figure.

| Quit |

Closes IMAGE MENU.

COLOR SELECTION MODE

Level and phase adjustment palette.   Gamma adjustment palette.
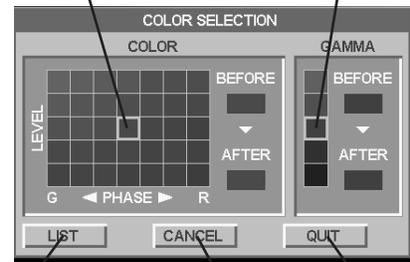
LIST   CANCEL   QUIT

LIST MODE   COLOR PALETTE

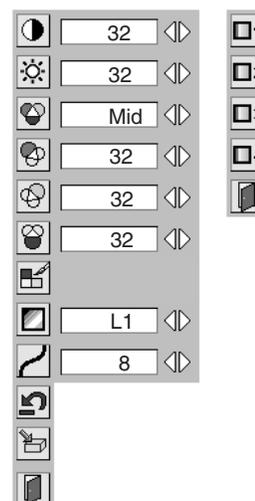DEL
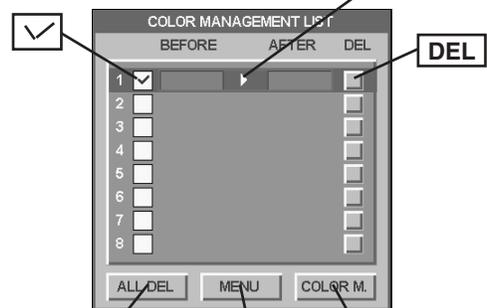
ALL DEL   MENU   COLOR M.

Image Level Menu
Move a red frame pointer to any of Image 1 to 4 where you want to set and then press SELECT button.

PICTURE SCREEN ADJUSTMENT

This projector has a picture screen resize function, which enables you to display desirable image size.

PICTURE SCREEN SELECT (MENU)

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button(s) to move a red frame pointer to SCREEN Menu icon.

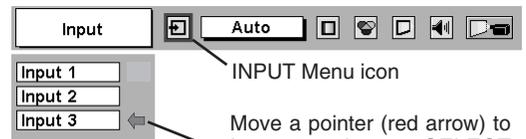*2* Press POINT DOWN button and move a red frame pointer to function that you want to select and then press SELECT button.
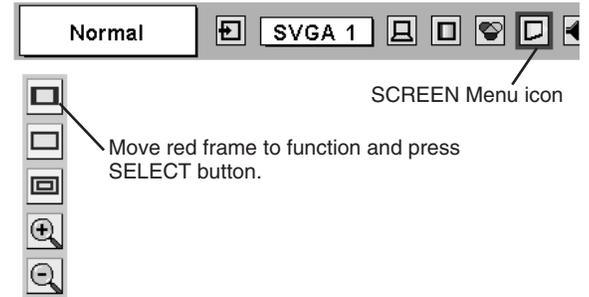
Normal

Provides image to fit the panel size of the screen.

Full

Provides image to fit the horizontal size of the screen.

True

Provides image in its original size. When the original image size is larger than screen size (1366 x 768), this projector enters "Digital Zoom +" mode automatically.

Digital zoom +

When Digital zoom + is selected, ON-SCREEN MENU disappears and message "D. Zoom +" is displayed. Press SELECT button to expand image size. And press POINT UP/DOWN/LEFT/RIGHT button(s) to pan image. Panning function can work only when image is larger than screen size.

Digital Zoom –

When Digital zoom – is selected, ON-SCREEN MENU disappears and message "D. Zoom –" is displayed. Press SELECT button to compress image size.

SCREEN MENU

Normal   SVGA 1

SCREEN Menu icon

Move red frame to function and press SELECT button.

NOTE

● True and Digital zoom +/– cannot be operated when "RGB", "1035i (HDTV)" or "1080i (HDTV)" is selected on PC SYSTEM Menu (P21).

● Full cannot be selected when "720p (HDTV)", "1035i (HDTV)" or "1080i (HDTV)" is selected on PC SYSTEM Menu (P21).

● This projector cannot display any resolution higher than 1280 X 1024. If your computer's screen resolution is higher than 1280 X 1024, reset resolution to lower before connecting projector.

● Image data in other than XGA (1024 x 768) is modified to fit screen size in initial mode.

● Panning function may not operate properly if computer system prepared on PC ADJUST Menu is used.

VIDEO INPUT

SELECTING INPUT SOURCE

WHEN SELECT INPUT 2 (5 BNC INPUT JACKS)

When connecting to those equipment, select a type of Video source in SOURCE SELECT Menu.

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button to move a red frame pointer to INPUT Menu icon.

2 Press POINT DOWN button to move a red arrow pointer to Input 2 and then press SELECT button. Source Select Menu will appear.

3 Move a pointer to source that you want to select and then press SELECT button.

| Video | When video input signal is connected to VIDEO jack, select Video. |

| Y,Pb/Cb,Pr/Cr | When video input signal is connected to Y-Pb/Cb-Pr/Cr jacks, select Y, Pb/Cb, Pr/Cr. |

INPUT MENU

INPUT Menu icon

Move a pointer (red arrow) to Input 2 and press SELECT button.

Input 2

Source Select Menu

Move a pointer to Video or Y, Pb/Cb, Pr/Cr and press SELECT button.
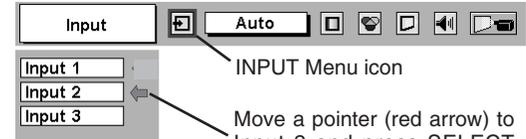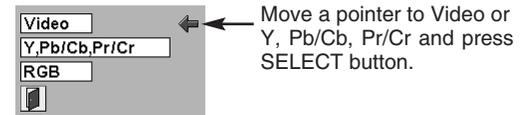
WHEN SELECT INPUT 3 (AV TERMINALS)

When connecting to those equipment, select a type of Video source in SOURCE SELECT (VIDEO) Menu.

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button to move a red frame pointer to INPUT Menu icon.

2 Press POINT DOWN button to move a red arrow pointer to Input 3 and then press SELECT button. Source Select Menu will appear.

3 Move a pointer to source that you want to select and then press SELECT button.

| Video | When video input signal is connected to VIDEO jack, select Video. |

| Y,Pb/Cb,Pr/Cr | When video input signal is connected to Y-Pb/Cb-Pr/Cr jacks, select Y, Pb/Cb, Pr/Cr. |

| S-Video | When video input signal is connected to S-VIDEO jack, select S-Video. |

INPUT MENU

INPUT Menu icon

Move a pointer (red arrow) to Input 3 and press SELECT button.

Input 3

Source Select Menu (VIDEO)

Move a pointer to source and press SELECT button.
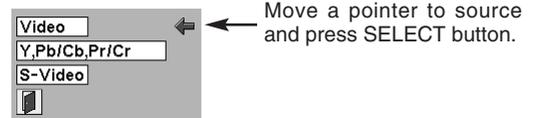
SELECTING VIDEO SYSTEM

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT buttons to move a red frame pointer to AV SYSTEM Menu icon.

2 Press POINT DOWN button to move a red arrow pointer to system that you want to select and then press SELECT button.
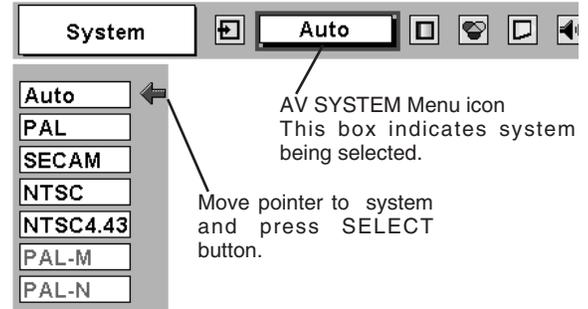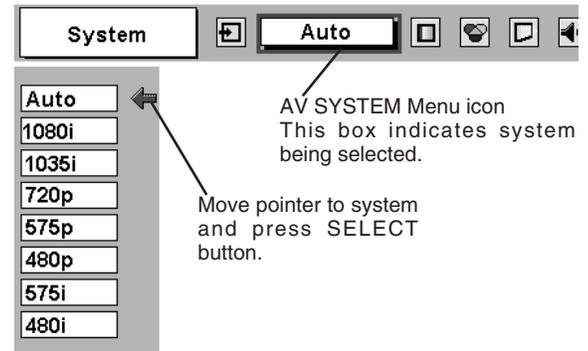
VIDEO JACK OR S-VIDEO JACK

Auto

Projector automatically detects incoming Video system, and adjusts itself to optimize its performance.
When Video System is PAL-M or PAL-N, select system manually first.

PAL / SECAM / NTSC / NTSC4.43 / PAL-M / PAL-N

If projector cannot reproduce proper video image, it is necessary to select a specific broadcast signal format among PAL, SECAM, NTSC, NTSC 4.43, PAL-M, and PAL-N.

Y, Pb/Cb, Pr/Cr JACKS

Auto

Projector automatically detects incoming Video signal, and adjusts itself to optimize its performance.
When Video System is 1035i or 1080i, select system manually first.

COMPONENT VIDEO SIGNAL FORMAT

If projector cannot reproduce proper video image, it is necessary to select a specific component video signal format among 480i, 575i, 480p, 575p, 720p, 1035i and 1080i.

AV SYSTEM MENU (VIDEO OR S-VIDEO)

AV SYSTEM Menu icon
This box indicates system being selected.

Move pointer to system and press SELECT button.

AV SYSTEM MENU (COMPONENT VIDEO)

AV SYSTEM Menu icon
This box indicates system being selected.

Move pointer to system and press SELECT button.

30

PICTURE IMAGE ADJUSTMENTS

IMAGE LEVEL SELECT (DIRECT)

Select image level among Standard, Cinema, Image 1, Image 2, Image 3 and Image 4 by pressing IMAGE button on Top Control.

Standard

Normal picture level preset on this projector.

Cinema

Picture level adjusted for picture with fine tone.

IMAGE 1~4

User preset picture adjustment in IMAGE ADJUST Menu (P32-34).

IMAGE button

```
    ┌──────────────┐
 ──▶│   Standard   │
 │  └──────────────┘
 │         │
 │         ▼
 │  ┌──────────────┐
 │  │    Cinema    │
 │  └──────────────┘
 │         │
 │         ▼
 │  ┌──────────────┐
 │  │   Image 1    │
 │  └──────────────┘
 │         │
 │         ▼
 │  ┌──────────────┐
 │  │   Image 2    │
 │  └──────────────┘
 │         │
 │         ▼
 │  ┌──────────────┐
 │  │   Image 3    │
 │  └──────────────┘
 │         │
 │         ▼
 │  ┌──────────────┐
 └──│   Image 4    │
    └──────────────┘
```

IMAGE LEVEL SELECT (MENU)

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button to move a red frame pointer to IMAGE SELECT Menu icon.

2 Press POINT DOWN button to move a red frame pointer to level that you want to set and then press SELECT button.

Standard

Normal picture level preset on this projector.

Cinema

Picture level adjusted for picture with fine tone.

IMAGE 1~4

User preset picture adjustment in IMAGE ADJUST Menu (P32-34).

IMAGE SELECT MENU

Image 1   Auto

IMAGE SELECT Menu icon

Move red frame pointer to level and press SELECT button.

Level being selected.

IMAGE LEVEL ADJUSTMENT

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button(s) to move a red frame pointer to IMAGE ADJUST Menu icon.

2 Press POINT DOWN button to move a red frame pointer to item that you want to adjust and then press SELECT button. Level of each item is displayed. Adjust each level by pressing POINT LEFT/RIGHT button(s).

Contrast

Press POINT LEFT button to decrease contrast, and POINT RIGHT button to increase contrast. (From 0 to 63.)

Brightness

Press POINT LEFT button to adjust image darker, and POINT RIGHT button to adjust brighter. (From 0 to 63.)

Color

Press POINT LEFT button to lighten color, and POINT RIGHT button to deeper color. (From 0 to 63.)

Tint

Press POINT LEFT button or POINT RIGHT button to obtain proper color. (From 0 to 63.)

Color Management

The Color management function can be used to adjust the level, phase and gamma of the selected display colors on the screen, and to replace these colors with other colors if required.
The projector lets you replace up to eight colors for each image.
There are four preset images for VIDEO mode and four preset images for PC, giving a total of eight images.

1 Press the POINT DOWN button to move the red frame pointer to "COLOR MANAGEMENT", and then press the SELECT button. The COLOR MANAGEMENT menu will appear and pointer mode will be enabled. The image that was being projected when the button was pressed will be paused, and the COLOR MANAGEMENT POINTER will appear.

2 Use the POINT buttons to move the pointer to a section of the paused image that contains the color that you would like to adjust, and then press the SELECT button. The mode will change to COLOR SELECTION mode, and the color in the center of the pointer will be selected and adjustment will be possible.

3 Use the POINT buttons to adjust the level and phase of the color, and then press the SELECT button to confirm the setting. Next, use the POINT buttons to adjust the gamma correction for the color, and then press the SELECT button to accept the setting. When the SELECT button is pressed, the mode will change to LIST mode.

4 To move the red frame pointer to "MENU", and then press the SELECT button. The message "OK"? is displayed. Move the pointer to [Yes] and then press SELECT button. The COLOR MANAGEMENT menu will be exited and the display will return to the IMAGE ADJUST menu. (At this time, the image will stop being paused and normal projection will resume.) After changing the COLOR MANAGEMENT settings, use the IMAGE ADJUST menu to store the changed settings.
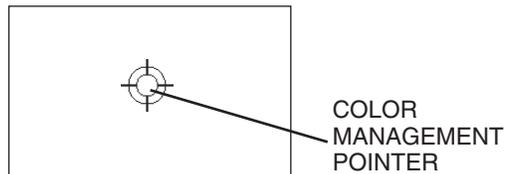
COLOR SELECTION MODE

CANCEL

The mode will return to the pointer mode (even if you press the MENU key on the projector or the remote control). (You will need to reselect and re-adjust the color in this case.)
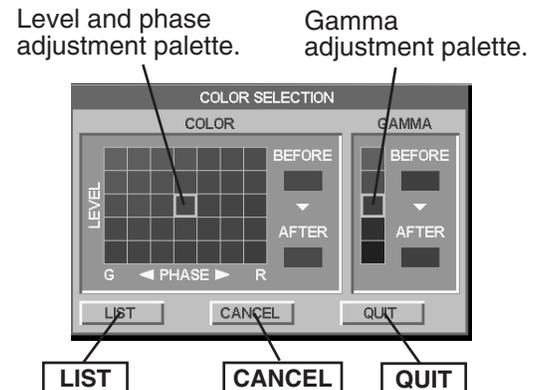
IMAGE ADJUST MENU

Move a red frame pointer to item to be selected and then press SELECT button.

IMAGE ADJUST Menu icon

Press POINT LEFT/RIGHT buttons to adjust value.

Press SELECT button at this icon to display other items.

POINTER MODE

COLOR MANAGEMENT POINTER

COLOR SELECTION MODE

Level and phase adjustment palette.

Gamma adjustment palette.

LIST   CANCEL   QUIT

32

QUIT

The COLOR MANAGEMENT menu will be exited and the display will return to the normal projection screen, but any settings that have been changed will not be stored. To store the changed settings, be sure to select "LIST" using the POINT buttons and change to the next mode (LIST mode).

LIST MODE

☑

The check mark will be cleared and the effect of the setting adjustment for that line on the projected images will be momentarily canceled.

COLOR PALETTE

The mode will return to COLOR SELECTION mode so that you can re-adjust the setting for the color in that line. This option is not available if the check mark has been cleared by the operation immediately above.)

DEL

The setting adjustment for the color in that line will be canceled.

ALL DEL

The setting adjustment for the colors in all lines will be canceled.

COLOR M.

The mode will return to POINTER mode.

Auto picture control

Press either POINT LEFT button or POINT RIGHT button to Auto picture control position that you want to select . (Off, L1 or L2)
Off ······· Auto picture control OFF position.
L1 ········· Auto picture control LEVEL 1 position.
L2 ········· Auto picture control LEVEL 2 position.

Color temp.

Press either POINT LEFT button or POINT RIGHT button to Color temp. level that you want to select. (XLow, Low, Mid or High)

White balance (Red)

Press POINT LEFT button to lighten red tone and POINT RIGHT button to deeper tone. (From 0 to 63.)

White balance (Green)

Press POINT LEFT button to lighten green tone and POINT RIGHT button to deeper tone. (From 0 to 63.)

White balance (Blue)

Press POINT LEFT button to lighten blue tone and POINT RIGHT button to deeper tone. (From 0 to 63.)

Sharpness

Press POINT LEFT button to soften image, and POINT RIGHT button to sharpen image. (From 0 to 15.)

Gamma

Press either POINT LEFT button or POINT RIGHT button to obtain better balance of contrast. (From 0 to 15.)

Noise reduction

Press POINT LEFT/RIGHT button(s) to change noise reduction mode. Dialog box display is changed to "On" to reduce noise (rough parts) of image. Press POINT LEFT/RIGHT button(s) again, to change noise reduction mode to off.

LIST MODE   COLOR PALETTE

COLOR MANAGEMENT LIST
BEFORE   AFTER   DEL

DEL

ALL DEL   MENU   COLOR M.

ALL DEL   MENU   COLOR M.

Press SELECT button at this icon to display previous items.

Mid

32

32

32

15

8

On

On

Press POINT LEFT/RIGHT buttons to adjust value.

Press SELECT button at this icon to store value.
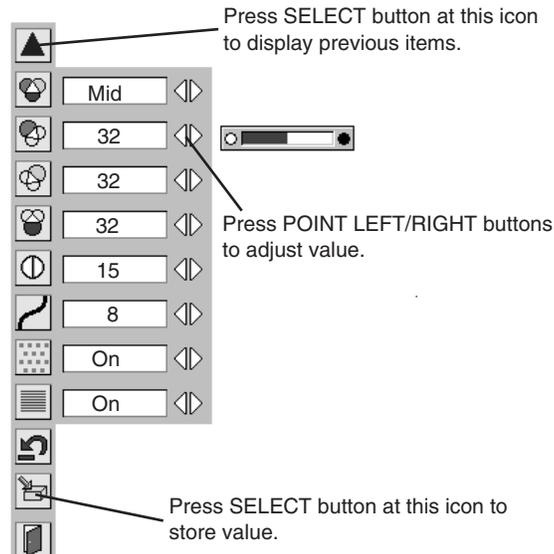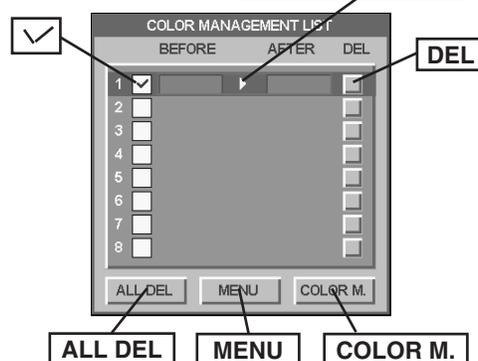
Progressive scan

Press POINT LEFT/RIGHT button(s) to change progressive scan mode. Dialog box display is changed to "Off" and progressive scan mode to off. Press POINT LEFT/RIGHT button(s) again, progressive scan mode to on.

NOTE :

Tint cannot be adjusted when video system is PAL, SECAM, PAL-M or PAL-N.

Progressive cannot be operated when "480p", "575p" or "720p" is selected on AV SYSTEM MENU (P30).
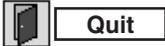
Store

To store adjustment data, move a red frame pointer to Store icon and press SELECT button. Image Level Menu will appear. Move a red frame pointer to Image Level 1 to 4 and then press SELECT button.

Other icons operates as follows.

Reset

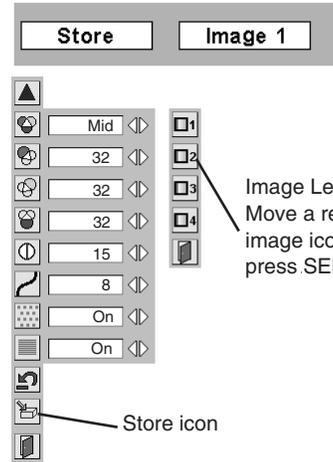Reset all adjustment to previous figure.

Quit

Closes IMAGE MENU.

Image Level Menu
Move a red frame pointer to image icon to be set and then press SELECT button.

Store icon

PICTURE SCREEN ADJUSTMENT

PICTURE SCREEN SELECT (MENU)

This projector has a picture screen resize function, which enables you to display desirable image size.

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button(s) to move a red frame pointer to SCREEN Menu icon.

2 Press POINT DOWN button and move a red frame pointer to function that you want to select and then press SELECT button.

Full

Provides image to fit width of screen by expanding image width uniformly. This function can be used for providing a squeezed video signal at wide video aspect ratio of 16 : 9.
When your video equipment (such as DVD) has 16 : 9 output mode, select 16 : 9 and select Full on this SCREEN Menu to provide better quality.

Zoom

Provides image to fit screen size (16 : 9 aspect ratio) by expanding image width and height uniformly. This function can be used for providing a letter box mode picture (4 : 3 aspect picture with black bar on top and bottom edges) at wide video aspect of 16 : 9.

Normal

Provides image at the normal video aspect ratio of 4 : 3.

Wide zoom

Provides image to fit width of screen by expanding both sides of image. This function is suitable to provide a normal video signal (4 : 3 aspect ratio) at wide video aspect ratio of 16 : 9.

SCREEN MENU

SCREEN Menu icon

Move the red frame to the function and press SELECT button.
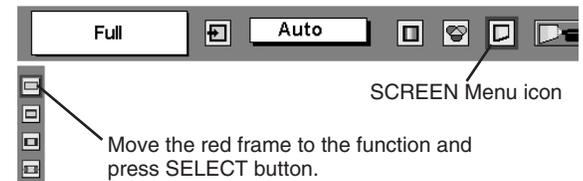
NOTE : SCREEN Menu cannot be operated when "720p," "1035i," or "1080i" is selected on AV SYSTEM Menu (P30).

SETTING

1 Press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button(s) to move a red-frame pointer to SETTING icon.

2 Press POINT DOWN button to move a red-frame pointer to item that you want to set and then press SELECT button. Setting dialog box appears.

Language

Language used in ON-SCREEN MENU is selectable from among English, German, French, Italian, Spanish, Portuguese, Dutch, Swedish, Chinese, Korean and Japanese.

Keystone

When image is distorted, select Keystone. ON-SCREEN MENU disappears and Keystone dialog box is displayed. Correct keystone distortion by pressing POINT UP/DOWN/LEFT/RIGHT button(s). Refer to KEYSTONE ADJUSTMENT on page 18.

Blue back

When this function is "On," this projector will produce a blue image instead of video noise on screen when any input source is unplugged or turned off.

Display

This function decides whether to display On-Screen Displays.
- On ··· shows all On-Screen Displays.
- Off ···· sets On-Screen Displays disappeared except;
  - ● ON-SCREEN MENU
  - ● "Power off?" message

Logo

When this function is "On," projector displays our logo when starting up.

Ceiling

When this function is "On," picture is top / bottom and left / right reversed. This function is used to project image from a ceiling mounted projector.

Rear

When this function is "On," picture is left / right reversed. This function is used to project image to a rear projection screen.

Power management

This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period in order to reduce power consumption and maintain Lamp-life. (This projector is shipped with this function ON.)

Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes. This function operates as follows;

1. When any input signal is interrupted, "No signal" and counting down display appears (for 5 minutes).

2. After counting down for 5 minutes, projector lamp and READY indicator are turned off.

3. When READY indicator flashing, Projection Lamp can be turned on again (Power Management mode).
   In this Power Management mode, Projection Lamp is automatically turned on when input signal connected or projector is operated with any button on Top Control again.
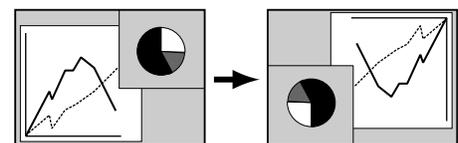
SETTING MENU
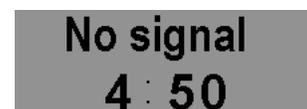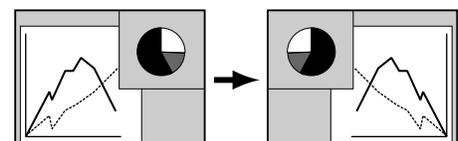
Set a red frame pointer to item and press SELECT button.

SETTING Menu icon
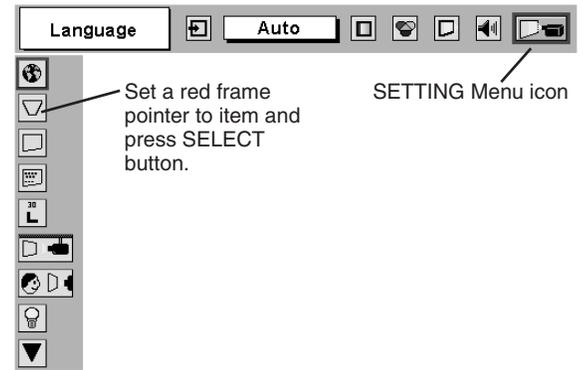
When pressing SELECT button at Language, Language Menu appears.

Move a pointer to item and then press POINT LEFT/RIGHT button(s).
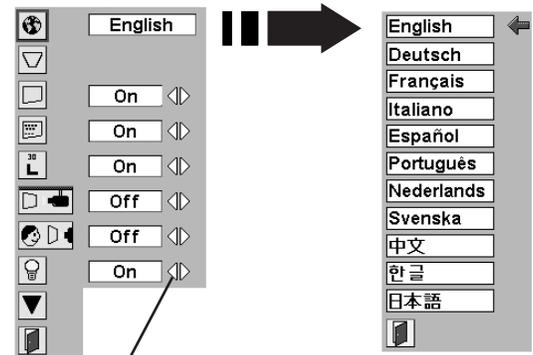
Ceiling function

Rear function

No signal
4 : 50

Time left until Lamp off.

SETTING

⊡ On start

When this function is "On," projector is automatically turned on just by connecting AC Power cord to a wall outlet.

Note ; Be sure to turn projector off properly (refer to section "TURNING OFF PROJECTOR" on P17). If projector is turned off in wrong steps, On Start function does not operate properly.

Remote control

This projector has two different remote control codes; factory-set normal code (Code 1) and secondary code (Code 2). This switching function prevents remote control operation mixture (jam) when operating several projectors or video equipment together.
When operating projector in "Code 2," both projector and Remote Control Unit must be switched to "Code 2."

To change code of Projector;
Set Remote control in SETTING MENU to "Code 2."

To change code of Remote Control Unit;
Press both MENU and IMAGE buttons on Remote Control Unit together for over 10 seconds.

After changing code, make sure Remote Control operates properly.
To return to normal code (Code 1), operate both projector and Remote Control in ways above again.

ChristieNet

This function can not be adjusted when the ChristieNet (optional part) is not attached to the projector.
Refer to the owner's manual of the optional ChristieNet for operating instructions

Lamp counter reset

This function is used to reset Lamp Replace Counter. When replacing Projection Lamp, reset Lamp Replace Counter by using this function. Refer to page 38 for operation.
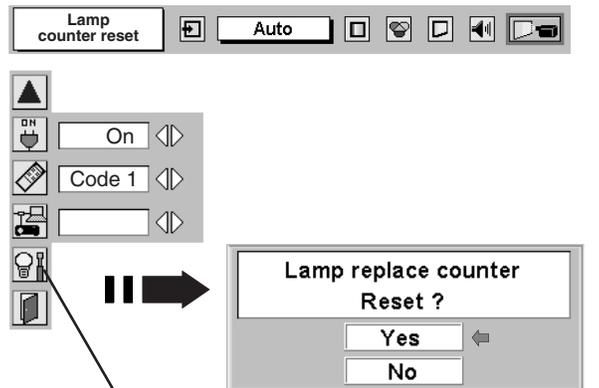
Quit

Closes SETTING MENU.
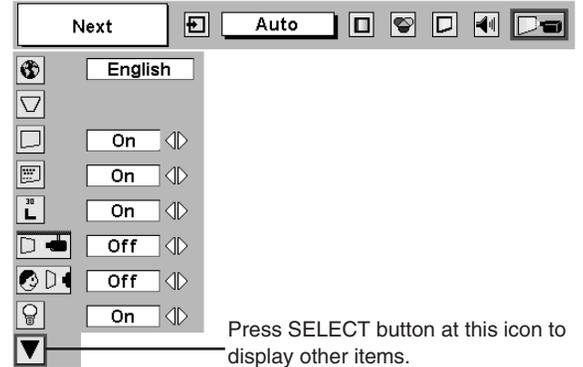
Press SELECT button at this icon to display other items.
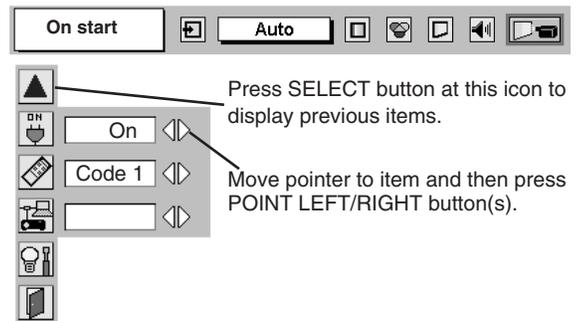
Press SELECT button at this icon to display previous items.

Move pointer to item and then press POINT LEFT/RIGHT button(s).

Move pointer to Lamp counter reset and then press SELECT button. Message "Lamp replace counter reset?" is displayed.

APPENDIX

MAINTENANCE

WARNING TEMP. INDICATOR

WARNING TEMP. Indicator flashes red when an internal temperature of a projector exceeds normal temperature. This Indicator stops flashing when temperature of a projector returns to normal.
When WARNING TEMP. Indicator continues to flash, check items listed below.

1   Ventilation Slots of a projector may be blocked. In such an event, reposition a projector so that Ventilation Slots are not obstructed.

2   Air Filter may be clogged with dust particles. Clean Air Filter by following section AIR FILTER CARE AND CLEANING below.

3   If WARNING TEMP. Indicator remains on after performing above checks, Cooling Fans or Internal Circuits may be malfunctioning. Contact service personnel from an authorized dealer or a service station.

AIR FILTER CARE AND CLEANING

Air Filter prevents dust from accumulating on surface of Projection Lens and Projection Mirror. Should Air Filter become clogged with dust particles, it will reduce Cooling Fans' effectiveness and may result in internal heat build up and adversely affect life of a projector. Clean Air Filter following steps below:

1   Turn off a projector, and disconnect AC power cord from AC outlet.

2   Turn a projector upside down and remove Air Filter (2 used) by pulling latches upward.

3   Clean Air Filter with a brush or wash out dust and particles.

4   Replace Air Filter properly. Make sure that Air Filter is fully inserted.

⚠ **CAUTION**
Do not operate a projector with Air Filter removed. Dust may accumulate on LCD Panel and Projection Mirror degrading picture quality.
Do not put small parts into Air Intake Vents. It may result in malfunction of a projector.
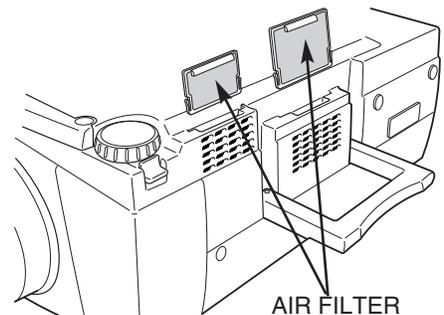
AIR FILTER
Pull up and remove.

RECOMMENDATION
We recommend avoiding dusty/smoky environments when operating a projector. Usage in these environments may cause poor image quality.

When using under dusty or smoky conditions, dust may accumulate on a lens, liquid crystal panels, or optical elements inside a projector. This condition may degrade quality of a projected image.
When above symptoms are noticed, contact your authorized dealer or service station for proper cleaning.

CLEANING PROJECTION LENS

Follow these steps to clean Projection Lens:

1   Apply a non-abrasive camera lens cleaner to a soft, dry cleaning cloth. Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents or other harsh chemicals might scratch a surface.

2   Lightly wipe a cleaning cloth over Projection Lens.

3   When a projector is not in use, replace Lens Cover.

LAMP REPLACE

When the life of the Projection Lamp of this projector draws to an end, the LAMP REPLACE indicator lights yellow. If this indicator lights yellow, replace the projection lamp with a new one promptly.

TOP CONTROL

LAMP
REPLACE

WARNING
TEMP.

ON-OFF

This indicator lights yellow when the life of the projection lamp draws to an end. Replace the Projection Lamp with a new one promptly.
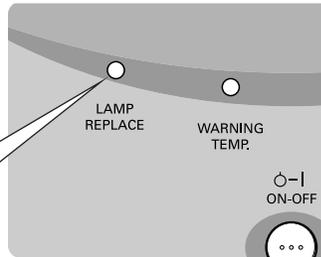
⚠ CAUTION

Allow a projector to cool, for at least 45 minutes before you open Lamp Cover. The inside of a projector can become very hot.

For continued safety, replace with a lamp assembly of the same type.
Do not drop a lamp assembly or touch a glass bulb! The glass can shatter and may cause injury.

Follow these steps to replace lamp assembly.

1 Turn off a projector and disconnect AC plug. Allow a projector to cool for at least 45 minutes.

2 Loosen 2 screws with a screwdriver and open Lamp Cover.

3 Loosen 2 screws with a screwdriver and pull out Lamp Assembly by grasping Handle.

4 Replace Lamp Assembly with a new one and tighten 2 screws back. Make sure that Lamp Assembly is set properly. Replace Lamp Cover and tighten 2 screws.

5 Connect AC Power Cord to a projector and turn it on.

6 Reset Lamp Replace Counter (refer to section "Lamp Replace Counter" below).

NOTE : Do not reset Lamp Replace Counter when Projection Lamp is not replaced.

LAMP COVER

LAMP
ASSEMBLY

HANDLE
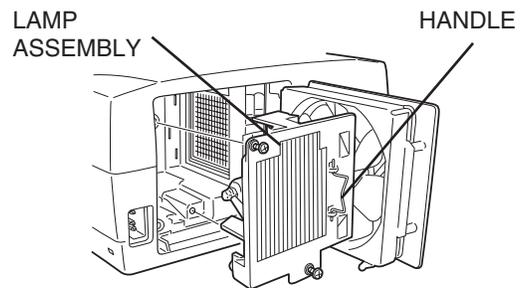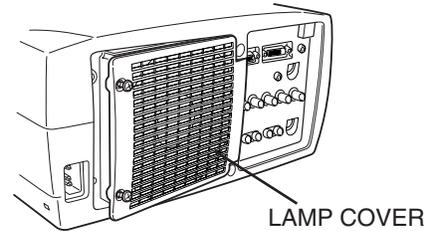
ORDER REPLACEMENT LAMP

Replacement Lamp can be ordered through your dealer. When ordering a Projection Lamp, give the following information to the dealer.

● **Model No. of your projector** : **38-VIV212-01**

● **Replacement Lamp Type No.** : **03-000649-01P**

(Service Parts No. 610 293 5868)

LAMP REPLACE COUNTER

Be sure to reset Lamp Replace Counter after the Lamp Assembly is replaced. When Lamp Replace Counter is reset, LAMP REPLACE Indicator stops lighting.

1 Turn projector on, press MENU button and ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT button(s) to move a red frame pointer to SETTING Menu icon (refer to page 36).

2 Press POINT DOWN button to move a red frame pointer to "Lamp counter reset" and then press SELECT button. Message "Lamp replace counter reset?" is displayed. Move pointer to [Yes] and then press SELECT button.

3 Another confirmation dialog box appears and select [Yes] to reset Lamp Replace Counter.
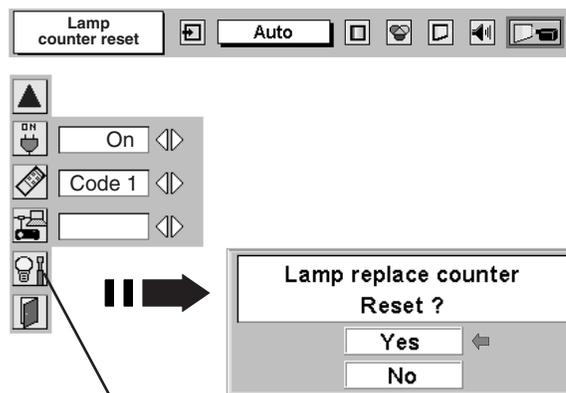
Move pointer to Lamp counter reset and then press SELECT button. Message "Lamp replace counter reset?" is displayed.

NOTE : Do not reset the Lamp Replace Counter until after the Projection Lamp is replaced.

⚠ LAMP HANDLING PRECAUTIONS

This projector uses a high-pressure lamp which must be handled carefully and properly. Improper handling may result in accidents, injury, or create a fire hazard.

● Lamp lifetime may differ from lamp to lamp and according to the environment of use. There is no guarantee of the same lifetime for each lamp. Some lamps may fail or terminate their lifetime in a shorter period of time than other similar lamps.

● If the projector indicates that the lamp should be replaced, i.e., if the LAMP REPLACE INDICATOR lights up, replace the lamp with a new one IMMEDIATELY after the projector has cooled down. (Follow carefully the instructions in the LAMP REPLACEMENT section of this manual.) Continuous use of the lamp with the LAMP REPLACE INDICATOR lighted may increase the risk of lamp explosion.

● A Lamp may explode as a result of vibration, shock or degradation as a result of hours of use as its lifetime draws to an end. Risk of explosion may differ according to the environment or conditions in which the projector and lamp are being used.

IF A LAMP EXPLODES, THE FOLLOWING SAFETY PRECAUTIONS SHOULD BE TAKEN.

If a lamp explodes, disconnect the projector's AC plug from the AC outlet immediately. Contact an authorized service station for a checkup of the unit and replacement of the lamp. Additionally, check carefully to ensure that there are no broken shards or pieces of glass around the projector or coming out from the cooling air circulation holes. Any broken shards found should be cleaned up carefully. No one should check the inside of the projector except those who are authorized trained technicians and who are familiar with projector service. Inappropriate attempts to service the unit by anyone, especially those who are not appropriately trained to do so, may result in an accident or injury caused by pieces of broken glass.

TROUBLESHOOTING

Before calling your dealer or service center for assistance, check matters below once again.

1. Make sure you have connected a projector to your computer or video equipment as described in section "CONNECTING PROJECTOR" on pages 11 ~ 13.
2. Check cable connection. Verify that all computer, video and power cord are properly connected.
3. Verify that all power is switched on.
4. If a projector still does not produce an image, re-start your computer.
5. If an image still does not appear, unplug a projector from your computer and check your computer monitor's display. Problem may be with your graphics controller rather than with a projector. (When you reconnect a projector, be sure to turn computer and monitor off before you power up a projector. Power equipment back on in order of : Projector and computer.)
6. If problem still exists, check following chart.

Problem:	Try these Solutions

No power.	● Plug a projector into your AC outlet.
	● Make sure READY Indicator lights.
	● Wait 90 seconds after a projector is turned OFF when turning a projector back on.
	
	NOTE : After pressing Power ON-OFF button to OFF, make sure a projector works as follows:
	
	    1. LAMP indicator lights bright and READY indicator turns off.
	    2. After 90 seconds, READY indicator lights green again and a projector may be turned on by pressing Power ON-OFF button.
	
	● Check WARNING TEMP. indicator. If indicator flashes red, a projector cannot be turned on.
	  (See "TURNING ON/OFF PROJECTOR" section on page 17.)
	● Check Projection Lamp. (Refer to page 38.)

Image is out of focus.	● Adjust focus of a projector. ● Make sure a projection screen is at least 5.0' (1.5m) from a projector. ● Check Projection Lens to see if it needs cleaning. NOTE : Moving a projector from a cool temperature location to a warm temperature location may result in moisture condensation on Projection Lens. In such an event, leave a projector OFF and wait until condensation disappears.
Picture is Left/Right reversed.	● Check Ceiling / Rear feature. (See "SETTING" section on page 35.)
Picture is Top/Bottom reversed.	● Check Ceiling feature. (See "SETTING" section on page 35.)
Some displays are not seen during Operation.	● Check Display feature.(See "SETTING" section on page 35.)
No image.	● Check connection between your computer or video equipment and a projector. ● When turning a projector on, it takes about 30 seconds to display an image. ● Check system that you select is corresponding with your computer or video equipment. ● Make sure temperature is not out of Operating Temperature (5°C ~ 35°C).
No sound.	● Check audio cable connection from audio input source. ● Adjust audio source. ● Press VOLUME (+) button.

SERVICE

WARNING: High voltages are used to operate this projector. Do not attempt to open cabinet.

You can often correct operating problems yourself. If the projector fails to work properly, see the "TROU-BLESHOOTING" section on page 40.

If after following all operating instructions, you find that service is necessary, contact the Christie Service Station or store where you purchased the unit.
Give the model number and explain the difficulty. We will advise you how to obtain service.

OPTIONAL PARTS

The parts listed below are optionally supplied. When ordering those parts, give the name and Type No. to the sales dealer.

● **Standard Zoom Lens**   **Type No. : 38-809050-01**
● **Short Zoom Lens**   **Type No. : 38-809047-01**
● **Long Zoom Lens**   **Type No. : 38-809048-01**
● **Short Fixed Lens**   **Type No. : 38-809049-01**

This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

The CE Mark is a Directive conformity mark of the European Community (EC).

TECHNICAL SPECIFICATIONS

Projector Type	Multi-media Projector
Dimensions (W x H x D)	12.6" x 6.6" x 16.8" (319 mm x 168 mm x 429.5 mm)
Net Weight	14.6 lbs (6.6 kg)
LCD Panel System	1.21" TFT Active Matrix type, 3 panels
Panel Resolution	1366 x 768 dots
Number of Pixels	3,147,264 (1366 x 768 x 3 panels)
Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M and PAL-N
High Definition TV Signal	480i, 480p, 575i, 575p, 720p, 1035i and 1080i
Scanning Frequency	H-sync. 15 ~ 100 KHz, V-sync. 50 ~ 100 Hz
Motorized Lens Shift	Up and Down
Horizontal Resolution	800 TV lines (HDTV)
Projection Lamp	200 watt type
Input 1 Jacks	DVI Terminal (Digital), HDB 15-pin Terminal (Analog) and Stereo Mini Type Jack (Audio)
Input 2 Jacks	BNC Type x 5 (G or VIDEO/Y, B or Cb/Pb, R or Cr/Pr, H and V), Stereo Mini Type Jack (Audio)
Input 3 Jacks	RCA Type x 3 (VIDEO/Y, Cb/Pb and Cr/Pr), RCA Type x 2 (Audio R and L) and DIN 4-pin (S-Video)
Other Jacks	DIN 8-pin (Control port) and ChristieNet Connector
Built-in Speakers	INT. SP. Stereo (R and L), 2 watt RMS (T.H.D. 10%)
Feet Adjustment	0˚ to 10.5˚
Voltage and Power Consumption	AC 100 ~ 120 V (3.6 A Max. Ampere), 50 / 60 Hz (The U.S.A and Canada) AC 200 ~ 240 V (1.8 A Max. Ampere), 50 / 60 Hz (Continental Europe)
Operating Temperature	41 ˚F ~ 95 ˚F (5 ˚C ~ 35 ˚C)
Storage Temperature	14 ˚F ~ 140 ˚F (-10 ˚C ~ 60 ˚C)
Accessories	AC Power Cord VGA Cable Control (Serial) port Cable

● Specifications are subject to change without notice.
● LCD panels are manufactured to the highest possible standards. At least 99.99% of the pixels are effective, however a tiny fraction of the pixels (0.01% or less) may be ineffective by the characteristics of the LCD panels.
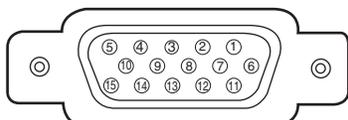
CONFIGURATIONS OF TERMINALS

COMPUTER INPUT-1 TERMINAL (ANALOG)

Terminal : HDB15-PIN

Connect display output terminal of computer to this terminal with VGA Cable (supplied). When connecting Macintosh computer, MAC Adapter (not supplied) is required.

Pin Configuration

1	Red Input	9	+5V Power
2	Green Input	10	Ground (Vert.sync.)
3	Blue Input	11	Sense 0
4	Sense 2	12	DDC Data
5	Ground (Horiz.sync.)	13	Horiz. sync.
6	Ground (Red)	14	Vert. sync.
7	Ground (Green)	15	DDC Clock
8	Ground (Blue)		

COMPUTER INPUT-1 TERMINAL (DIGITAL)

Terminal : DVI 24-pin

Connect display output terminal of computer to this terminal with DVI cable (for Single Link T.M.D.S. / not supplied).
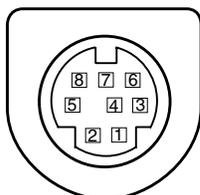
Pin Configuration
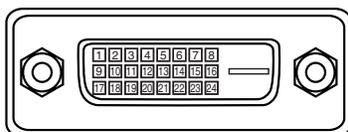
1	T.M.D.S. Data2–	9	T.M.D.S. Data1–	17	T.M.D.S. Data0–
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2 Shield	11	T.M.D.S. Data1 Shield	19	T.M.D.S. Data0 Shield
4	No Connect	12	No Connect	20	No Connect
5	No Connect	13	No Connect	21	No Connect
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground (for +5V)	23	T.M.D.S. Clock+
8	No Connect	16	Hot Plug Detect	24	T.M.D.S. Clock–

CONTROL PORT CONNECTOR

Terminal : Mini DIN 8-PIN

Connect serial port on your computer to this connector with Control Cable (supplied).

Pin Configuration

	Serial
1	R X D
2	-----
3	-----
4	GND
5	RTS / CTS
6	T X D
7	GND
8	GND

CHKISTIE

Project. Present. Perform.

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Part No. 10-A 610 310 8360 (1AA6P1P4329-- M4LKA)